

Wichita/Sedgwick County Unified Building & Trade Code

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UNDER CONSTRUCTION
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Amendments to the International Residential Code

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Article 2, Section 4 - INTERNATIONAL RESIDENTIAL CODE

Sec. 2.4.010. - Adoption of the International Residential Code.

The International Residential Code, as published by International Codes Council, Inc., 2018 Edition, is hereby adopted and incorporated herein by reference, subject to such amendments thereto as are set forth hereinafter. Any references within Article 2, Section 4 of the Wichita-Sedgwick County Unified Building and Trade Code to the International Residential Code shall apply to the aforementioned version of the International Residential Code. All provisions within Article 2, Section 4 of the Wichita-Sedgwick County Unified Building and Trade Code prior to passage of the resolution and ordinance adopting the 2018 International Residential Code shall remain unchanged unless otherwise indicated within such resolution and ordinance.

Sec. 2.4.020 - Permit required.

R105.1 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, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.

Wichita Jurisdiction Only

Whenever any work for which a permit is required by this Code has commenced without first obtaining said permit, a civil penalty fee up, to the amount of the permit fee, as determined by the Code Official, shall be collected in addition to the permit fee.

Sec. 2.4.030. – Work exempt from permit is amended to read as follows:

Sec. 2.4.030. - Work exempt from permit.

Section R105.2 of the International Residential Code is amended to read as follows:

R105.2 Work exempt from permit: Exemption from permit requirements of this Code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this Code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

BUILDING:

1.

(a) Within the Wichita Jurisdiction, one-story detached accessory structures classified as Groups S or U occupancies are exempt from the requirement to obtain a building permit provided the floor area does not exceed 200 square feet (18.58 m²) and a location permit is obtained from the MABCD prior to installation. For Wichita Jurisdiction location permits, the owner or authorized agent shall submit a site plan and MABCD staff will complete a pre-construction assessment of the site plan to ensure that the proposed location for the structure is not impermissibly located in a floodplain, floodway, easement, setback, or protrude onto a neighboring property. Lacking the presence of any of those conditions, MABCD staff will authorize

the construction of the structure. After construction of the structure, MABCD staff will complete a post-construction on-site inspection to ensure the structure has been constructed in the location identified on the location permit.

(b) Within the Sedgwick County Jurisdiction, one-story detached accessory structures classified as Groups S or U occupancies are exempt from the requirement to obtain a building permit provided the floor area does not exceed 400 square feet and (provided such structure is in the unincorporated area of Sedgwick County) a location permit is obtained from the MABCD prior to installation. For Sedgwick County Jurisdiction location permits, the owner or authorized agent shall submit a site plan and MABCD staff will complete a pre-construction assessment of the site plan to ensure that the proposed location for the structure is not impermissibly located in a floodplain, floodway, easement, setback, or protrude onto a neighboring property. Lacking the presence of any of those conditions, MABCD staff would authorize the construction of the structure and no follow-up inspection would be necessary.

Location permits are not required in second- and third-class cities that contract with Sedgwick County, which are otherwise considered to be part of the Sedgwick County Jurisdiction.

Exception to Location Permit Requirement (applicable within the Wichita Jurisdiction and the Sedgwick County Jurisdiction): Non-fixed and movable storage cabinets equipped with doors that conceal the contents within and having a footprint not exceeding 25 square feet (2.32 m²), shall not require the issuance of a location permit.

All detached accessory structures within both the Wichita Jurisdiction and the Sedgwick County Jurisdiction greater than 25 (2.32 m²) but equal to or less than 400 (37.16 m²) square feet shall be tied down to the earth using anchoring methods described in "Non Vehicular Storage Structure Anchoring Standards" of the City of Wichita; or be attached to a permanent concrete foundation per R403.1.6.

- 1.1 Playhouses or tree houses having single or multi-level floors with or without roofs.
2. Concrete or masonry fences not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall and other fences not over 8 feet (2438 mm) high.
 - 2.1 Concrete or masonry monument sign bases not 4 feet (1219 mm) in height measured from the lowest point of the adjoining grade. The sign size and content requires separate approval and permit.
3. 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.
4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18,925 L) and the ratio of height to diameter or width does not exceed 2 to 1.
5. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade and not over any basement or story below.
6. Decks, stoops, and porches not more than 30 inches (762 mm) above adjacent grade without overhead structures and not over any basement or story below.
7. Replacement of floor covering, painting, papering, tiling, carpeting, cabinets, counter tops, paneling

and similar finish work.

8. Prefabricated swimming pools that are less than 24 inches (610 mm) deep and the capacity does not exceed 5,000 gallons (18,925 L) in which the pool walls are entirely above ground.

9. Swings and other playground equipment accessory to a one- or two-family dwelling.

10. Window awnings supported by an exterior wall which do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.

11. Emergency board-up, or securing temporary bracing of a building after a fire, storm, vehicle damage or other disaster which caused the building to be open or unsafe. The building owner or his/her agent may cause such work to be done provided that the MABCD is notified the following business day.

12. Repair or replacement of roofing and/or siding materials not exceeding 400 square feet (37.16 m²) within any 12 month period.

13. Repair or replacement of interior gypsum wallboard on non-fire rated walls or ceilings when the total area does not exceed 100 square feet (9.29 m²) within any 12-month period and provided that no framing electrical, mechanical or plumbing changes are made.

14. Replacement of windows or doors or replacement of roof skylights or equipment with the same size or smaller unit(s) that does not involve the removal, cutting, alteration or replacement of any building structural member; including but not limited to studs, headers, girders, beams, joists, rafters, cripples, jacks or other supporting framing member(s). The framing used to infill existing openings for the purpose of installing smaller unit(s) shall be exempt from permit requirements. Placement of smaller windows or doors shall not reduce the minimum size requirements of escape and rescue openings, or egress door(s) required in Sections R310 and R311 of this Code. The replacement door or window shall not be of a lower fire rating than required by this Code for any rated wall or assembly.

ELECTRICAL:

Exemptions for electrical permits shall be governed by Article 4 of this Code.

GAS:

1. Portable heating, cooking or clothes drying appliances.

2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

3. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

MECHANICAL:

1. Portable heating appliances.

2. Portable ventilation appliances.

3. Portable cooling units.

4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this Code.
5. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
6. Portable evaporative coolers.
7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.
8. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, water 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 Code. 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.

Sec. 2.4.035. - Exclusion of “hoop houses” from building code requirements.

A "hoop house" is defined as the following: A poly-tunnel (also known as a poly- house, hoop greenhouse or hoop house, or high tunnel) made of polyethylene usually semi- circular, square or elongated in shape. The interior heats up due to solar radiation from the sun, thus warming plants, soil, and other things inside the building faster than heat can escape the structure. Air warmed by the heat from hot interior surfaces is retained in the building by the roof and wall. Hoop houses, within this definition, are for residential use only.

Sec. 2.4.040. – Emergency repairs.

Section R105.2.1 of the International Residential Code, is amended as follows:

R105.2.1 Emergency repairs. Where repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.

Sec. 2.4.050. – Repairs.

Section R105.2.2 of the International Residential Code, is amended to read as follows:

R105.2.2 Repairs. Application or notice to the building official is not required for ordinary repairs to structures. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting away of any structural beam or load-bearing support, or 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 gas, mechanical or other work affecting public health or general safety.

Sec. 2.4.060. - Section R105.2.3 deleted.

Section R105.2.3 of the International Residential Code is deleted.

Sec. 2.4.070. – Permit expiration.

Section R105.5 of the International Residential Code is amended to read as follows:

R105.5 Expiration. Every permit issued shall expire 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. Work shall be considered to have been suspended or abandoned if it has been more than 180 days since the last requested inspection. Before work can be recommenced, the permit must be re-instated. The fee for re-instatement shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work; and that such suspension or abandonment has not exceeded one year. In order to resume work after suspension or abandonment for a period exceeding one year, a new permit shall be required. The code official is authorized to grant, in writing, one or more extensions of time for periods not more than 180 days each. The extensions shall be requested in writing and justifiable cause demonstrated.

Sec. 2.4.080. – Placement of inspection record card and address marker.

Section R105.7 of the International Residential Code is amended to read as follows:

R105.7 Placement of inspection record card and address marker. The inspection record card shall be kept on the site of the work until the completion of the project. Work requiring a permit shall not be commenced until the inspection record card is posted or otherwise made available on the site. The inspection record card shall be maintained and available on site until final inspection approval has been granted by the building official. Work shall not be started until the address is posted in such a position as to be plainly visible and legible from the street or road fronting the site.

Sec. 2.4.090. – Refunds.

Section R108.5 Refunds. The building official may authorize refunding of any fee paid hereunder, which was erroneously paid or collected. The building official may authorize refunding of not more than 80% of the fee paid when no work has been done under the permit in accordance with this Code and if 180 days has not expired since the issuance of said permit.

Sec. 2.4.100. – Final inspection.

Section R109.1.6 of the International Residential Code is amended to read as follows:

R109.1.6 Final Inspection. Final inspection shall be made after the permitted work is complete and prior to occupancy. This requirement may be waived by the building official for approvals granted to limited contractors who are part of self-certification programs established and monitored by the MABCD. In these instances the contractors must meet all established program criteria, must provide all required documentation, and be subject to periodic audits by the MABCD. The building official may revoke permission to self-certify, for cause, at any time.

Sec. 2.4.110. – Alternative provisions.

Section R301.1.1 of the International Residential Code is amended to read as follows:

R301.1.1 Alternative provisions. As an alternative to the requirements in Section R301.1 the following standards are permitted subject to the limitations of this Code and the limitations therein. Where

engineered design is used in conjunction with these standards the design shall comply with the International Building Code.

1. American Forest and Paper Association (AAF&PA) Wood Frame Construction Manual (WFCM).
2. American Iron and Steel Institute (AISI) Standard for Cold-Formed Steel Framing - Prescriptive Method for One- and Two-Family Dwellings (COFS/PM) with Supplement to Standard for Cold-Formed Steel Framing - Prescriptive Method for One- and Two-Family Dwellings.
3. The Wichita Foundation, Basement and Slab-on-Grade Standards for One and Two Family Dwellings (August 30, 2011).
4. The City of Wichita Standard for Residential Wood Framed Decks – Deck Standards.

(This space intentionally blank.)

Sec. 2.4.115. - Table R301.2(1) amended.

Table R301.2(1) of the International Residential Code is amended to read as follows:

Table R301.2(1) Climatic and Geographic Design Criteria. The Climatic and Geographic Design Criteria for building design shall be as provided in Table R301.2 (1).

Table R301.2(1) of the International Residential Code is amended to read as follows:

TABLE R301.2(1) - SECTION R301, DESIGN CRITERIA

Climatic and Geographic Design Criteria for Sedgwick County, Ks.

Ground Snow Load – 15 psf	Design Temps
Wind Speed (mph) – 76w/90-3 sec. gust	Air Freezing Temp. - 400
Seis. Design Cat. - A	Mean Air Temp. - 55-60 deg.
Weathering - Severe	Summer - 98
Frost Line Depth - 24 inches	2.5% dry bulb
Termite - Mod./Severe	Winter - 76
Winter Design Temp. - 97.50% - 7	2.5% wet bulb
Ice Barrier - None Required	Heating Degree Days - 4,620

	Roof	Floor
Dead Load -	10 lb. psf	10 lb. psf.
Live Load -	20 lb. spf	40 lb. psf.

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

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this Code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade. For construction of one and two family dwelling habitable spaces, the *Wichita Foundation, Basement and Slab-on-Grade Standards for One and Two Family Dwellings* (August 30, 2011) shall apply.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been any 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(4)]. 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 97 ½ - percent values for winter from Appendix D of the *International Plumbing Code*. Deviations from the Appendix D temperatures shall be submitted to reflect local climates or local weather experience as determined by the building official.

f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.

g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the currently effective FIRM and FBFM, or other flood hazard map adopted by the community, as may be amended.

h. In accordance with Sections R905.2.7.a, R905.4.3.1, R905.5.3.1, 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 freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index - USA Method (Base 32° Fahrenheit)" at www.ncdc.noaa.gov/fpsf.html.

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° Fahrenheit)" at www.ncdc.noaa.gov/fpsf.html.

(This space intentionally left blank.)

Sec. 2.4.120. - Live load.

Section R301.5 of the International Residential Code, is amended to read as follows:

R301.5 Live load. The minimum uniformly distributed live load shall be as provided in Table R301.5.

TABLE R301.5 - MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS

(in pounds per square foot)

USE	LIVE LOAD
Attics with limited storage ^{b, g, h}	20
Attics without storage ^b	10
Decks ^e	40
Exterior balconies	60
Fire escapes	40
Guardrails and handrails ^d	200 ⁱ
Guardrails in-fill components ^f	50 ⁱ
Passenger vehicle garages ^a	50 ^a
Rooms other than sleeping rooms	40
Sleeping rooms	40
Stairs	40 ^c

For SI: 1 pound per square foot = 0.0479 kPa, 1 square inch = 645 mm², 1 pound = 4.45 N.

- a. Elevated garage floors shall be capable of supporting a 2,000-pound load applied over a 20-square-inch area.
- b. Attics without storage are those where the maximum clear height between joist and rafter is less than 42 inches, or where there are not two or more adjacent trusses with the same web configuration capable of containing a rectangle 42 inches high by 2 feet wide, or greater, located within the plane of the truss. For attics without storage, this live load need not be assumed to act concurrently with any other live load requirements.
- c. Individual stair treads shall be designed for the uniformly distributed live load or a 300-pound concentrated load acting over an area of 4 square inches, whichever produces the greater stresses.
- d. A single concentrated load applied in any direction at any point along the top.
- e. See Section R502.2.1 for decks attached to exterior walls.
- f. Guard in-fill components (all those except the handrail), balusters and panel fillers shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to 1 square foot. This load need not be assumed to act concurrently with any other live load requirement.

g. For attics with limited storage and constructed with trusses, this live load need be applied only to those portions of the bottom chord where there are two or more adjacent trusses with the same web configuration capable of containing a rectangle 42 inches high or greater by 2 feet wide or greater, located within the plane of the truss. The rectangle shall fit between the top of the bottom chord and the bottom of any other truss member, provided that each of the following criteria is met:

1. The attic area is accessible by a pull-down stairway or framed opening in accordance with Section R807.1; and
 2. The truss has a bottom chord pitch less than 2:12.
- h. Attic spaces served by a fixed stair shall be designed to support the minimum live load specified for sleeping rooms.
- i. Glazing used in handrail assemblies and guards shall be designed with a safety factor of 4. The safety factor shall be applied to each of the concentrated loads applied to the top of the rail, and to the load on the in-fill components. These loads shall be determined independent of one another, and loads are assumed not to occur with any other live load.

Sec. 2.4.130. – Exterior walls *is deleted.*

Sec. 2.4.138. - Opening Protection is added to read as follows:

Section R302.5.1 of the International Residential Code is amended to read as follows:

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb- core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors.

Sec. 2.4.140. - Habitable rooms.

Section R303.1 of the International Residential Code is amended to read as follows:

R303.1 Habitable rooms. All habitable rooms shall have an aggregate glazing area of not less than 8 percent of the floor area of such rooms. Natural ventilation shall be through windows, doors, louvers or other approved openings to the outdoor air. Such openings shall be provided with ready access or shall otherwise be readily controllable by the building occupants. The minimum openable area to the outdoors shall not be less than 4 percent of the floor area being ventilated.

Exceptions:

1. The glazed areas need not be openable where the opening is not required by Section R310 and an approved mechanical ventilation system capable of producing 0.35 air change per hour in the room is installed or a whole-house mechanical ventilation system is installed capable of supplying outdoor ventilation air of 15 cubic feet per minute (cfm) (78 L/s) per occupant computed on the basis of two occupants for the first bedroom and one occupant for each additional bedroom.
2. The glazed area need not be installed in rooms where Exception 1 above is satisfied

and artificial light is provided capable of producing an average illumination of 6 foot-candles (65 lux) of the area of the room at a height of 30 inches (762 mm) above the floor level.

3. Use of sunroom additions and patio covers, as defined in Section R202, shall be permitted for natural ventilation if in excess of 40 percent of the exterior sunroom walls are open, or are enclosed only by insect screening.

In new dwellings and additions to existing one and two family dwellings, where a new separate heating and/or cooling system is being added to serve, but not necessarily limited to serving the new addition, an outside air duct shall be connected to the main return air duct, prior to filter, of each heating and/or cooling system for the habitable space served. Duct size shall be based on the square footage of habitable space served as follows:

1. 1500 sq. ft. or less: 4 inch diameter or 12.6 square inches.
2. 1501 sq. ft. to 2000 sq. ft. 5 inch diameter or 19.6 square inches.
3. 2001 sq. ft. and larger 6 inch diameter or 28.3 square inches. All areas listed exclude finished basement area. The outside air duct shall be provide with a ¼ inch mesh inlet screen. The outside air duct shall not draw air from contaminated sources.

Sec. 2.4.150. - Bathrooms.

Section R303.3 of the International Residential Code, is amended to read as follows:

R303.3 Bathrooms. Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 (0.3 m²) square feet, one-half of which must be openable.

Exception: The glazed areas shall not be required where artificial light and a mechanical ventilation system are provided. The minimum ventilation rates shall be 50 cubic feet per minute (24 L/s) for intermittent ventilation or 20 cubic feet per minute (10 L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside or into a properly ventilated attic when all of the following are met:

1. The duct(s) conveying exhaust into the attic shall terminate a minimum of 36 inches above the top of the ceiling framing members, and shall not discharge upon any building element.
2. Attics into which bath and/or toilet room exhausts are discharged must be properly ventilated, in accordance with Section R806, and shall not discharge into an unvented attic assembly.
3. The exhaust duct(s) shall terminate above the top of the attic insulation with a "goose-neck" installed to prevent infiltration of insulating material into the duct.
4. Exhaust duct(s) run above the insulation inside of attics, with a developed length greater than 5 feet, shall be insulated.

Sec. 2.4.160. – Section R303.7 Stairway illumination deleted.

Section R303.7 of the International Residential Code *is hereby deleted.*

Sec. 2.4.170. – Reserved is hereby deleted.

Section R308.4 of the International Residential Code is hereby deleted.

Sec. 2.4.180. – Section R309.5 Fire Sprinklers.

Section R309.5 of the International Residential Code is hereby deleted.

Sec. 2.4.190. - Minimum opening area, height and width.

Sections R310.2.1 through R310.2.3 of the International Residential Code are amended as follows:

R310.2.1 Minimum opening area. All emergency escape and rescue openings shall have a minimum net clear opening of 4.5 (0.418 m²) square feet with the window in an open position, with a total break-out area of 5.7 (0.530 m²) square feet. The minimum net clear opening shall be maintained to a public way, yard or court.

R310.2.2 Minimum opening height. The minimum net clear opening height shall be:

1. 19¾ inches (501.7 mm) plus or minus ¼ inch for single, double hung and awning style windows.

For all other types of windows the minimum height shall be determined by multiplying the width times the height to achieve a total net clear opening of 4.5 (114.3 mm²) square feet with a total break-out area of 5.7 (0.530 m²) square feet.

R310.2.3 Minimum opening width. The minimum net clear opening width shall be:

1. 17 inches (431.8 mm) plus or minus ¼ inch in the open position for casements and slider windows.
2. 30¼ (768.35 mm) inches plus or minus ¼ inch for single and double hung units.

Former Wichita-Sedgwick County Building and Trade Code Sec. 2.4.200 entitled “Minimum opening height” and Sec. 2.4.210 entitled “Minimum opening width” are deleted, as they are now accounted for within Sec. 2.4.190.

Sec. 2.4.220. - Ladder and steps.

Section R310.2.3.1 of the International Residential Code is amended to read as follows:

R310.2.3.1 Ladders, steps and fall protection. Window wells with a vertical depth greater than 44 inches (1118 mm) shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position. Ladders or steps required by this section shall not be required to comply with Section R311.7. Ladders or rungs shall have an inside width of at least 12 inches (305 mm), shall project at least 3 inches (76 mm) to the back of the rung

from the wall and shall be spaced not more than 12 inches (305 mm) on center vertically for the full height of the window well. Window wells with a vertical depth of more than 30 inches (762 mm) shall be provided with guardrails that are designed in accordance with Section R312, or a protective cover designed to a minimum of 20 pounds per square foot (0.96 KN per m²) uniformly distributed live load. Window well covers shall be provided with an emergency egress hatch located above the ladder or steps, with the minimum egress opening maintained. The force required to open the egress hatch shall not exceed 30 pounds (133.45 N) and shall not require the use of keys, more than one operation, or any special knowledge or effort. Window well covers, grates, and guardrails shall be constructed of materials approved for exterior use.

Section 2.4.225 Drainage of the International Residential Code is amended to read as follows:

Section R310.2.3.2 Drainage of the International Residential Code is hereby added to read as follows:

R310.2.3.2 Drainage. Window wells shall be designed for proper drainage by connecting to the existing foundation drainage system required by Section R405.1 or by an approved alternative method. If no existing foundation drainage system has been installed, the entire window well area shall have a minimum depth of 12" of washed gravel or crushed rock below the floor level.

Exception: A drainage system for window wells is not required when the foundation is on well-drained soil or sand-gravel mixture soils according to the U.S. Soil Classification System, Group I Soils, as detailed in Table 405.1.

Sec. 2.4.235. - Floor elevations for other exterior doors is added to read as follows:

Section R311.3.2 of the International Residential Code is amended to read as follows:

R311.3.2 Floor elevations for other exterior doors. Doors other than the required egress door shall be provided with landings or floors not more than 8 inches below the top of the threshold.

Exception: A landing is not required where a stairway of four or fewer risers is located on the the door, provided the door does not swing over the stairway.

Sec. 2.4.240. - Risers is amended to read as follows:

Section R311.7.5.1 of the International Residential Code is amended to read as follows:

R311.7.5.1 Risers: The maximum riser height shall be 8 (203 mm) inches. The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

Sec. 2.4.250. -Treads is amended to read as follows:

Sections R311.7.5.2 and R3.11.7.5.2.1 of the International Residential Code are amended to read as follows:

R311.7.5.2 Treads. The minimum tread depth shall be 9 inches (228.6 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

R311.7.5.2.1 Winder and circular treads. Winder and circular treads shall have a minimum tread depth of 9 inches (228.6 mm) measured as above at a point 12 inches (305 mm) from the side where the treads are narrower. Winder and circular treads shall have a minimum tread depth of 6 inches (152 mm) at any point. Within any flight of stairs, the largest winder or circular tread depth at the 12-inch (305 mm) walk line shall not exceed the smallest by more than 3/8 inch (9.5 mm).

Sec. 2.4.270. - Landings for stairway deleted.

Section R311.7.6 of the International Residential code is hereby deleted.

Sec. 2.4.270. - Landings for stairways (former title) is *amended* to read as follows:

Sec. 2.4.270. - Reserved.

Sec. 2.4.280. - Handrails.

Section R311.7.8.1 of the International Residential Code is amended to read as follows:

R311.7.8.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 32 inches (864 mm) and not more than 38 inches (965 mm).

Exceptions:

1. The use of a volute, turnout or starting easing shall be allowed over the lowest tread.
2. When handrail fittings or bendings are used to provide continuous transition between flights, transitions at winder treads, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings or bending's shall be permitted to exceed the maximum height.

Sec. 2.4.290. - Handrails continuity.

Section R311.7.8.4 of the International Residential Code is amended to read as follows:

R311.7.8.4 Continuity. Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned to the wall or shall terminate in newel posts or safety terminals at the top of each flight of stairs. Handrails adjacent to a wall shall have a space of not less than 1.25 (32.5mm) inches between the wall and the handrails.

Graspable portions of the handrail may not end up completely continuous from the top riser to the bottom riser. The rail shall return to the wall.

Exceptions:

- (1) Handrails shall be permitted to be interrupted by a newel post at the turn.
- (2) The use of a volute, turnout or starting easing, or starting newel shall be allowed over the lowest tread.

Sec. 2.4.300. - Handrail grip size.

Section R311.7.8.5 of the International Residential Code is amended to read as follows:

R311.7.8.5 Handrail grip size. All required handrails shall be of one of the following types or provide equivalent grasp ability.

1. Type I. Handrails with a circular cross section shall have an outside diameter of at least 1¼ inches (32 mm) and not greater than 2 inches (51 mm). If the handrail is not circular it shall have a perimeter dimension of at least 4 inches (102 mm) and not greater than 6¼ inches (160 mm) with a maximum cross section of dimension of 2¼ inches (57 mm).
2. Type II. Handrails with a perimeter greater than 6¼ inches (160 mm) shall provide a graspable finger recess area on the outboard side of the profile. The finger recess shall begin within a distance of ¾ inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the profile. This required depth shall continue for at least 3/8 inch (9.5 mm) to a level that is not less than 1¾ inches (45 mm) below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1¼ inches (32 mm) to a maximum of 2¾ inches (70 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).

Sec. 2.4.310. – Guard opening limitations is amended to read as follows:

Section R312.1.3 of the International Residential Code is amended to read as follows:

R312.1.3 Opening limitations. Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4 1/8 inches (104.8 mm) or more in diameter. Required guards shall not be constructed with horizontal rails or other ornamental pattern that results in a ladder effect.

Exceptions:

1. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 6 inches (152 mm) cannot passthrough.
2. Openings for required guards on the sides of stair treads shall not allow sphere 4 inches (101.6 mm) to pass through.

Sec. 2.4.320. - Single-and multiple-station smoke alarms.

Section R314.3 of the 2018 International Residential Code is amended to read as follows:

R314.3 Location. Single and multiple-station smoke alarms shall be installed in the following locations:

1. Outside of each separate sleeping area in the immediate vicinity of the bedrooms.
2. On each additional story of the dwelling, including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

R314.4 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling unit in accordance with Section R314.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where wireless alarms are installed & all alarms sound on activation of one alarm.

Section 2.4.330. - Carbon monoxide alarms *is added to read as follows:*

R315.1 *Carbon monoxide alarms* of the International Residential Code is amended to read as follows:

R315.1 Carbon monoxide alarms. For new construction, an approved carbon monoxide alarm shall be installed in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages in the following locations:

1. Outside each sleeping room in the immediate vicinity of the bedrooms.
2. On each additional story of the dwelling, including basements in the immediate vicinity of the bedrooms or mechanical room.

Sec. 2.4.332. - Thermal barrier.

Section R316.4 of the International Residential Code is amended to read as follows:

R316.4 Thermal barrier. Unless otherwise allowed in Section R316.5, foam plastic shall be separated from the interior of a building by an approved thermal barrier of minimum 0.5 inch (12.7 mm) gypsum wallboard or an approved finish material equivalent to a thermal barrier material that will limit the average temperature rise of the unexposed surface to no more than 250°F (139°C) after 15 minutes of fire exposure complying with the ASTM E 119 standard time temperature curve. The thermal barrier shall be installed in such a manner that it will remain in place for 15 minutes based on NFPA 286 with the acceptance criteria of section R315.4, FM4880, UL 1040 or UL 1715.

Exception: Insulating concrete forms (ICFs) may be used without the thermal barrier described in Section 314.4 when the foam plastic meets the following criteria:

1. The foam plastic has a minimum self-ignition temperature of 450 degrees C when tested in accordance with ASTM D 1929;
2. The foam plastic has a flame-spread rating of less than 25 and a smoke-developed rating of less than 450 when tested in accordance with ASTM E 84
3. The foam plastic wall assembly has a minimum two (2) hour fire resistance rating when tested in accordance with ASTM E 119; and the ICF has a valid ICCES ER number.

Sec. 2.4.335. – Section R315.3 deleted.

Section R315.3 of the International Residential Code is hereby deleted in its entirety. Carbon monoxide detectors are not required in existing homes.

Sec. 2.4.350. – Protection against decay.

Section R317.1 of the International Residential Code is amended to read as follows:

R317.1 Location required. Protection from decay shall be provided in the following locations by the use of naturally durable wood or wood that is preservative treated in accordance with AWP A U1 for the species, product, preservative and end use. Preservatives shall be listed in Section 4 of AWP A U1.

1. Wood joists or the bottom of a wood structural floor when closer than 18 inches (457 mm) or wood girders when closer than 12 inches (305 mm) to the exposed ground in crawl spaces or unexcavated area located within the periphery of the building foundation.
2. All wood framing members that rest on concrete or masonry exterior foundation walls and are less than 6 inches (152 mm) from the exposed ground.
3. Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground unless separated from such slab by an impervious moisture barrier.
4. The ends of wood girders entering exterior masonry or concrete walls having clearances of less than 0.5 inch (12.7 mm) on tops, sides and ends.
5. Wood siding, sheathing and wall framing on the exterior of a building having a clearance of less than 6 inches (152 mm) from the ground.
6. Wood structural members supporting moisture-permeable floors or roofs that are exposed to the weather, such as concrete or masonry slabs, unless separated from such floors or roofs by an impervious moisture barrier.

Sec. 2.4.360. – Section R318.1 deleted.

Section R318.1 of the International Residential Code is hereby deleted.

Sec. 2.4.380. – Section R322 deleted and Section R324 deleted.

Section R322 of International Residential Code is hereby deleted.

Section R324 of the International Residential Code is hereby deleted.

Sec. 2.4.400. - Section R403.1.1 created.

Section R403.1.1 of the International Residential Code is amended to read as follows:

R403.1.1. Minimum size. Minimum sizes for concrete and masonry footings shall be as set forth in Table R403.1 (1) through R403.1 (3). For construction of one and two family dwelling habitable spaces, the Wichita Foundation, Basement and Slab-on-Grade Standards for One and Two Family Dwellings (August 30, 2011) shall apply.

The footing width, W, shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. Spread footings shall be at least 6 inches (152 mm) thick. Footing projections, P, shall be at least 2 inches (51 mm) and shall not exceed the thickness of the footing. The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1. Footings for wood foundations shall be in accordance with the details set forth in Section R403.2, and Figures R403.1 (2) and R403.1 (3).

Sec. 2.4.410. - Section R403.1.3.3 created.

Section R403.1.3.3 of the International Residential Code is amended to read as follows:

R403.1.3.3 Slabs-on-grade with turned-down footings and slabs-on-grade cast monolithically with a footing. For slabs-on-grade with turned-down footings and slabs-on-grade cast monolithically with a footing, construction of one and two family dwelling habitable spaces shall comply with the Wichita Foundation, Basement and Slab-on-Grade Standards for One and Two Family Dwellings (August 30, 2011).

Sec. 2.4.420. - Minimum depth.

Section 403.1.4 of the International Residential Code is hereby amended to read as follows:

R403.1.4 Minimum depth. All exterior footings shall be placed at least 24 (610 mm) inches below the undisturbed ground surface. For construction of one and two family dwelling habitable spaces, the Wichita Foundation, Basement and Slab-on-Grade Standards for One and Two Family Dwellings (August 30, 2011) shall apply. Where applicable, the depth of the footings shall also conform to Sections R403.1.4.1.

Sec. 2.4.430. - Frost protection.

Section R403.1.4.1 of the International Residential Code is amended to read as follows:

R403.1.4.1 Frost protection. Section R403.1.4.1 of the International Residential Code is amended to read as follows:

Frost Protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extended below the frost line specified in Table R301.2.(1), per amended Table footnote "b." and the Wichita Foundation, Basement and Slab-on-Grade Standards for One and Two Family Dwellings (August 30, 2011);
2. Constructing in accordance with Section R403.3;
3. Constructing in accordance with ASCE 32; or
4. Erected on solid rock

Exceptions:

1. Protection of freestanding accessory structures with an area of 400 (36.2m²) square feet or less of light-framed construction with an eave-height of 10 feet (3048mm) or less shall not be required.
2. Protection of freestanding accessory structures with an area 400 square feet (36.2m²) or less of other than light-framed construction with an eave-height of 10 feet (3048mm) or less shall not be required.

Footings shall not bear on frozen soil. Frost depth in Wichita is 24 inches.

Sec. 2.4.440. - Section R403.1.8 created.

Section R403.1.8 of the International Residential Code is amended to read as follows:

R403.1.8 Foundations on expansive soils. Foundations and floor slabs for buildings located on expansive soils shall be designed in accordance with Section 1808.6 of the International Building Code or as specified in the Wichita Foundation, Basement and Slab-on-Grade Standards for One and Two Family Dwellings (August 30, 2011).

Sec. 2.4.455.-Concrete or masonry foundation deleted.

Section R405.1 Concrete or masonry foundation of the International Residential Code is hereby deleted.

Sec. 2.4.457. – Fire protection of floors deleted.

Section R501.3 Fire protection of floors of the International Residential Code is hereby deleted.

Sec. 2.4.460. - Floor trusses.

Section R502.11.4 of the International Residential Code is amended to read as follows:

Floor Truss design drawings. Floor truss design drawings, prepared in compliance with Section R502.11.1, shall be provided to the building official at the framing inspection. Truss design drawings shall be provided with the shipment of trusses delivered to the job site. Truss design drawings shall include, at a minimum, the information specified below:

1. Slope or depth, span, and spacing.
2. Location of all joints.
3. Required bearing widths.

4. Design loads as applicable:
 - 4.1. Top chord live load (including snow loads);
 - 4.2. Top chord dead load;
 - 4.3. Bottom chord live load;
 - 4.4. Bottom chord dead load;
 - 4.5. Concentrated loads and their points of application; and
 - 4.6. Controlling wind and earthquake loads.
5. Adjustments to lumber and joint connector design values for conditions of use.
6. Each reaction force and direction.
7. Joint connector type and description, e.g., size, thickness or gauge, and the dimensioned location of each joint connector except where symmetrically located relative to the joint interface.
8. Lumber size, species and grade for each member.
9. Connection requirements for:
 - 9.1. Truss-to-truss girder;
 - 9.2. Truss ply-to-ply; and
 - 9.3. Field splices.
10. Calculated deflection ratio and/or maximum description for live and total load.
11. Required permanent truss member bracing location.

Sec. 2.4.480. – Decks.

Section R507 of the International Residential Code is amended to read as follows:

R507 Decks. The "City of Wichita Standard for Residential Wood Framed Decks" may be used to design and construct decks to comply with the requirements of this section. Decks which fall outside of the scope of the standard will require design by a Kansas licensed architect or engineer. Where supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure and designed for both vertical and lateral loads as applicable. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting. For decks with cantilevered framing members, connections to exterior walls or other framing members, shall be designed and constructed to resist uplift resulting from the full live load specified in Table R301.5 acting on the cantilevered portion of the deck.

Sec. 2.4.490. - Section R506.2.2 deleted.

Section R506.2.2 of the International Residential Code is hereby deleted.

Sec. 2.4.510. – Cement, fiber cement and glass mat gypsum backers is hereby deleted.

Sec. 2.4.520. - Size and Spacing.

Section R703.8.4.1 of the International Residential Code is amended to read as follows:

R703.8.4.1 Size and spacing. Veneer ties, if strand wire, shall not be less in thickness than No. 9 U.S. gage [(0.148 in.) (4 mm)] wire and shall have a hook embedded in the mortar joint, or if sheet metal, shall be not less than No. 26 [(0.0245 in.) (0.62 mm)] U.S. gage by 7/8 inch (22 mm) corrugated. Each tie shall be spaced not more than 16 (406 mm) inches on center horizontally and vertically and shall support not more than 1.96 (0.19 m²) square feet of wall area. When stud spacing is 24 (610 mm) inches on center, ties may be spaced 24 inches (610 mm) on center to match stud spacing (maximum 1.96 (0.19 m²) square feet still required). All ties shall be attached to a stud.

Exception: In Seismic Design Category D0, D1 or D2 or townhouses in Seismic Design Category C or in wind areas of more than 30 pounds per square foot pressure (1.44 kPa), each tie shall support not more than 2 square feet (0.2 m²) of wall area.

Sec. 2.4.560. - Re-covering versus replacement.

Section R907.3 of the International Residential Code is hereby deleted.

Sec. 2.4.580. - Part IV - Energy Conservation deleted.

Part IV - Energy Conservation of the International Residential Code is hereby deleted.

Sec. 2.4.590. - Part V – Mechanical chapters deleted.

Part V – Mechanical chapters of the International Residential Code is hereby deleted.

Sec. 2.4.600. – Part VI – Fuel Gas.

Part VI, Fuel Gas of the International Residential Code is hereby adopted.

Sec. 2.4.610. - Part VII - Plumbing deleted.

Part VII - Plumbing, of the International Residential Code is hereby deleted.

Sec. 2.4.620. - Part VIII - Electrical deleted.

Part VIII - Electrical, of the International Residential Code is hereby deleted.

Sec. 2.4.790. - Fuel gas (application).

Section G2401.1 (101.2) of the International Residential Code is amended to read as follows:

G2401.1 (101.2) Application. This chapter covers fuel-gas utilization appliances and related accessories, venting systems and combustion air configurations most commonly encountered in the construction of one- and two-family dwellings and structures regulated by this Code. Requirements for gas appliances and related accessories shall include installation, combustion and ventilation air and venting. Fuel gas piping, systems, and connections for buildings governed by the International Residential Code, shall be regulated by Article 3 of this Code. The omission from this chapter of any material or method of installation provided for in the International Fuel Gas Code shall not be construed as prohibiting the use of such material or method of installation. Fuel-gas piping systems, fuel-gas appliances and related accessories, venting systems and combustion air configurations not specifically covered in these chapters shall comply with the applicable provisions of the International Fuel Gas Code.

Gaseous hydrogen systems shall be regulated by Chapter 7 of the International Fuel Gas Code.

This chapter shall not apply to the following:

1. Liquefied natural gas (LNG) installations.
2. Temporary LP-gas piping for buildings under construction or renovation that is not to become part of the permanent piping system.
3. Except as provided in Section G2412.1.1, gas piping, meters, gas pressure regulators, and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-gas.
4. Portable LP-gas equipment of all types that is not connected to a fixed fuel piping system.
5. Portable fuel cell appliances that are neither connected to a fixed piping system nor interconnected to a power grid.
6. Installation of hydrogen gas, LP-gas and compressed natural gas (CNG) systems on vehicles.

Sec. 2.4.800. - Section G2404.10 (307.5) created.

Section G2404.10 (307.5) of the International Residential Code is amended to read as follows:

G2404.10 (307.5) Auxiliary drain pan. Category IV condensing appliances shall have an auxiliary drain pan when located above finished ceilings or furred spaces. These pans shall be installed in accordance with the applicable provisions of Section M1411.

Exception: An auxiliary drain pan shall not be required for appliances that automatically shut down operation in the event of a stoppage in the condensate drainage system.

Sec. 2.4.810. - Appliance location.

Section G2406.2 (303.3) of the International Residential Code is amended to read as follows:

G2406.2 (303.3) Prohibited locations. Appliances shall not be located in or obtain combustion air from sleeping rooms, bathrooms, toilet rooms, storage closets or surgical rooms, or in a space that opens 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 conditions of the listing and the manufacturer's 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 G2445.6 and has an input rating not greater than 6,000 Btu/h (1.76 kW). The bathroom shall meet the required volume criteria of Section G2407.5.
4. A single wall-mounted unvented room heater is installed in a bedroom and such unvented room heater is equipped as specified in Section G2445.6 and has an input rating not greater than 10,000 Btu/h (2.93 kW). The bedroom shall meet the required volume criteria of Section G2407.5.
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 or other approved areas.
6. Replacement of fuel fired appliances installed in toilet rooms if approved by the building official.

Sec. 2.4.820. - Section G2408 (305.7) created.

Section G2408.4 (305.7) of the International Residential Code is amended to read as follows:

G2408.4 (305.7) Clearances from grade. The placement of appliances in relation to ground level shall be governed by Section 2.4.550 of this Code.

Sec. 2.4.830. - Section G2410 (309) created.

Section G2410 (309) of the International Residential Code is amended to read as follows: *Section*

G2410 (309) Electrical shall be regulated by Article 4 of this Code.

Sec. 2.4.840. - Section G2410.2 (309.2) created.

Section G2410.2 (309.2) of the International Residential Code is amended to read as follows:

G2410.2 (309.2) Connections. Electrical connections between gas appliances and the building wiring, including the grounding of the appliances, shall conform to Article 4 of this Code.

Sec. 2.4.850. - Section G2411 (310) created.

Section G2411 (310) of the International Residential Code is amended to read as follows:

Section G2411 (310) Electrical bonding shall be regulated by Article 4 of this Code.

Sec. 2.4.860. - Sections of Chapter 24 (regulating gas piping) amended.

The following sections of Chapter 24 shall each be amended to read as follows:

Sections G2412 (401), G2413 (402), G2414 (403), G2415 (404), G2416 (405), G2417 (406), G2418 (407), G2419 (408), G2420 (409), G2421 (410), G2422 (411), G2423 (413) and G2424 (415) of the International Residential Code shall be regulated under Article 3 of this Code.

Sec. 2.4.870. - Section G 2426.4 (502.4) deleted.

Section G 2426.4 (502.4) of the International Residential Code is hereby deleted.

Sec. 2.4.880. - Venting.

Section G 2436.2 (608.2) of the International Residential Code is amended to read as follows:

G2436.2 (608.2) Venting. Vented wall furnaces shall be vented in accordance with Section G2427. The wall cavity directly above the wall furnace shall be ventilated by a 26 gage (0.016 inch) (0.4 mm) metal thimble into attic; or, an eight (8) (203 mm) inch by fourteen (14) (356 mm) inch metal grill a minimum of twelve (12) (305 mm) inches below the ceiling.

Sec. 2.4.890. - Floor Furnaces.

Section G 2437.1 (609.1) of the International Residential Code is amended to read as follows:

General. Floor furnaces shall be tested in accordance with ANSI Z21.86/CSA 2.32 and shall be installed in accordance with the manufacturer's installation instructions. Replacement of floor furnaces with the same or lesser B.T.U. rating may be installed in the same location with prior approval by the building official.

Sec. 2.4.900. - Section G2448 (624) is hereby amended to read as follows:

Section G2448 (624) of the International Residential Code is amended to read as follows:

Section G2448 (624) Water Heaters of the International Residential Code is hereby deleted. Water heaters shall be regulated under Article 3 of this Code

Sec. 2.4.910. – Appendix Q Tiny Houses is hereby created.

Section AQ Tiny Houses – Definitions, **Tiny House** is amended to read as follows: A dwelling that is 500 square feet or less in floor area excluding lofts.

SEVERABILITY

Should any section, clause or provision of this Resolution be declared by any court of competent jurisdiction to be invalid, the same shall not affect the validity of this Resolution as a whole, or any part thereof, other than the part so declared to be invalid.

PUBLICATION AND EFFECTIVE DATE

Upon adoption of this Resolution, the Sedgwick County Clerk shall publish this Resolution once in the official county newspaper. This Resolution shall become effective January 1, 2019.

ARTICLE 3 - MABCD PLUMBING CODE

Article 3, Section A- BOARD OF APPEALS OF PLUMBERS AND GAS FITTERS

Sec. 3.A.010 - Board of Appeals - Created, Composition

There is authorized a board of plumbing and gas fitters appeals which shall consist of the Director of the Metropolitan Area Building and Construction Department ("MABCD"), or the duly authorized representative, who shall serve as the secretary of the board, and seven other members, as follows:

- (1) One mechanical contractor (appointed by the City);
- (2) One master plumber (appointed by the County);
- (3) One master lawn sprinkler (appointed by the City);
- (4) One journeyman plumber (appointed by the County);
- (5) One mechanical engineer (appointed by the County);
- (6) One master plumber contractor (appointed by the City); and
- (7) One public at large member (appointed jointly).
- (8)

The board shall elect its own chairman and make such rules as are necessary for the conduct of its business.

Sections 107.1 and 107.2 of the 2015 Uniform Plumbing Code are deleted in their entirety.

Sec. 3.A.020 - Board of Appeals of Plumbers and Gas Fitters.

(a) The Board shall act as a board of appeals in making a determination of any appeal arising from the actions of the administrative authority. Appeals shall be made in writing, and the appellant may appear in person before the Board or be represented by an attorney, and may introduce evidence to support their claim. Appeals shall be submitted in writing at least ten (10) working days in advance of the Board meeting and the appeals shall be heard at reasonable times at the convenience of the Board, but not later than the next regularly scheduled Board meeting. The appellant shall cause to be made at his own expense, any tests or research required by the Board to substantiate their claims.

(b) The Board shall, upon the request of the administrative authority, interpret sections of this Code, as adopted by reference herein, as to the approval of plumbing materials and methods allowed under this Code.

(c) Where conditions exist on any plumbing job which are not specifically provided for by this Code, or where it would be impracticable to follow its provisions, the Board may grant a variance from the strict application of the provisions of this Code. The person or persons desiring such variance shall submit all data and information necessary or as may be required by the Board to enable it to make its decision, and if after thorough study of the desired variance it determines that the granting of such request would not act in contravention to the welfare of the public, it shall have the authority to grant the variance.

(d) The Board may consider applications for the use of materials or methods of installation not specifically covered in this Code, or for a change in the grading or quality of materials or for a change in methods of installation as set forth in this Code and accept, modify, or reject the same as affording the same degree of safety, sanitation and performance as the materials or methods provided for herein. The Board may use established standards of nationally recognized laboratories and research organizations in making its determination to accept, modify, or reject the application. The applicant shall submit to the Board all necessary information as may be required by the Board in order for it to make its determination, and any expense incurred for the payment of laboratory reports and tests shall be borne by the applicant. If, after a thorough study of the application and upon the basis of such study, it is determined that the public interest would be best served, would not be detrimental to the health and welfare of the public and would afford the same degree of safety and sanitation as elsewhere provided for in this Code, the Board may approve the application; or should it be determined that it is against public interest, would be detrimental to the health and welfare of the public, would not afford the same degree of safety and sanitation as elsewhere provided for in this Code, the Board shall deny the application.

Sec. 3.A.030 Administrative Authority.

The administrative authority duly appointed to enforce the standard code shall be the Director of the MABCD or designees(s). The terms "administrative authority", "building official", and Director of MABCD are synonymous. The administrative authority shall have the authority to promulgate such rules and regulation as are necessary to carry out the purpose of the standard code and such rules and regulations shall be effective upon approval by the governing bodies. The Administrative authority shall have the authority to refer to the Board of Appeals of Plumbers and Gas Fitters that relates to the approval of plumbing material and methods as the same relate to the standard code.

Section 103.1 of the Uniform Plumbing Code shall be deleted in its entirety.

Article 3, Section 1 - MABCD PLUMBING

CODE Sec. 3.1.010 - MABCD Plumbing Code.

The Uniform Plumbing Code, published by the International Association of Plumbing and Mechanical Officials (IAPMO), 2015 Edition, including the Appendixes and Installation Standards thereto and including the Uniform Plumbing Code's latest edition of Table 1701.1 excluding;

Sections 103.1, 107.1, 107.2,
Table No. 104.5 Plumbing Permit Fees,
Sections 312.13, 312.14,
Sections 422.1, 422.1.1, 422.2, 422.2.1, 422.3, 422.4, 422.4.1, 422.5,
Table 422.1
Sections 604.10.1, 609.11, 609.11.1, 609.11.2,

Part II of Chapter 7: Building Sewers,
Sections 807.3,
Sections 1014.0, 1015.0,
Section 1210.1.5
Appendix F,
Appendix H,

and except for amendments set forth in this section, is by reference incorporated herein and made a part of this Code as though set forth at length herein, and is hereby adopted as a part of the Wichita/Sedgwick County Unified Building and Trade Code, Article 3, MABCD Plumbing Code. In lieu of Appendix Hand Chapter 7 Part II, within the jurisdiction of the unincorporated area of Sedgwick County, and adopting second and third class cities, Chapter 23 of the Sedgwick County Code, entitled Sewers and Sewage Disposal, shall apply. In lieu of Appendix Hand Chapter 7 Part II, within the jurisdiction of the City of Wichita, Title 16 of the Code of the City of Wichita, entitled Sewers, Sewage Disposal and Drains shall apply.

Within the Sedgwick County Jurisdiction. the International Plumbing Code, 2015 Edition, in its entirety, and the International Residential Code, 2015 Edition, Chapters 1 and 24 through 33-to the extent that such code provisions apply to plumbing matters-both codes published by the International Code Council, Inc., are by reference incorporated herein and made a part of this Code as though set forth at length herein. and are hereby adopted as a part of the Wichita/Sedgwick County Unified Building and Trade Code entitled Article 3, MABCD Plumbing Code.

Within the Sedgwick Jurisdiction, the International Fuel Gas Code, 2015 Edition published by the International Code Council, Inc., to the extent that said code's provisions are referred to within the International Plumbing Code, 2015 Edition and the provisions of the International Residential Code, 2015 Edition that pertain to plumbing matters, said International Fuel Gas Code is by reference incorporated herein and made a part of this Code as though set forth at length herein, and said International Fuel Gas Code is also hereby adopted as a part of the Wichita/Sedgwick County Unified Building and Trade Code entitled Article 3, MABCD Plumbing Code.

Sec. 3.1.015 - Operation of dual plumbing codes incorporated within the MABCD Plumbing Code within the Sedgwick County Jurisdiction.

SEDGWICK COUNTY JURISDICTION ONLY

The following provisions describe the manner in which the MABCD will operate with dual plumbing codes incorporated into this MABCD Plumbing Code within the Sedgwick County Jurisdiction:

- (a) At the time that a permit is applied for under this Code or any other action is taken to initiate work on a project under this Code, the contractor or property owner who obtains the permit shall indicate whether that work will be completed pursuant to the provisions of the 2015 Uniform Plumbing Code, as amended by this Code, or the 2015 International Plumbing Code/ 2015 International Residential Code Uointly termed "2015 ICC"). After such designation, the

work will be required to meet the terms of the selected code until the permitted work is completed.

- (b) In the event that any contractor or other person begins work without selecting a code or without obtaining a permit, the default code that will be applied to their work and any possible enforcement action is the 2015 Uniform Plumbing Code, with amendments included within this Code.
- (c) On matters involving the 2015 ICC, the Director of the MABCD and his/her designee are granted the authority to issue administrative waivers, distinct from any other similar procedures contained within this Code, pursuant to Section 105.1 of the 2015 International Plumbing Code, which reads as follows, such that the Director and his/her designee would be considered the "code official":

Where there are practical difficulties in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's authorized agent, provided the code official shall first find that special individual reason makes the strict letter of this code impractical and the modification conforms to the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modification shall be recorded and entered in the files of the plumbing inspection department [MABCD].

Furthermore, any contractor or other person completing work under a permit utilizing the 2015 ICC shall be authorized to complete that work consistent with any of the local amendments to the 2015 Uniform Plumbing Code, without the requirement of obtaining an administrative waiver.

- (d) All administrative waivers considered and decided by the Director and his/her designee pursuant to subsection (c) shall be reported to the Sedgwick County Board of County Commissioners.
- (e) Any party aggrieved by an administrative waiver decision of the Director and his/her designee pursuant to subsection (c) may have an appeal heard by the Board of Appeals of Plumbers and Gas Fitters, pursuant to Sec. 3.A.020 of this Code.
- (f) For any plumbing permits that have been applied for prior to the effective date of the 2015 ICC adoption and have not been finalized prior to such effective date, the party that pulled the permit may contact the MABCD in writing within 30 days after the effective date of the 2015 ICC to request that the 2015 ICC apply to their permit. Unless a timely request is received by the MABCD, all permits applied for prior to the effective date of the 2015 ICC adoption will be required to meet the requirements of this Code that existed on the date that the party applied for the permit.
- (g) Regardless of which plumbing code a permit designates, the same fees included within Article 1.2 of the Wichita-Sedgwick County Unified Building and Trade Code shall apply.

Sec. 3.1.020- Section 101.1 of the 2015 Uniform Plumbing Code.

Section 101.1 of the 2015 Uniform Plumbing Code shall be amended to read as follows:
With the exception of Sections 3.1.030, 3.1.040, and 3.1.050 (which apply to all of this Code), all of the subsequent provisions of this Code modify and apply to the 2015 Uniform Plumbing Code.

Sec. 3.1.030- Schedule of fees. See Article 1.2 of this Code.

Sec. 3.1.040 - Investigation fees. See Article 1.2 (e) of this Code.

Sec. 3.1.050- Definitions.

Unless otherwise specified, the following terms, as used in this Section, shall mean as follows:

'Apprentice' means an individual who works as an employee in training under the direct supervision of a Journeyman Plumber or Master Plumber. An apprentice is not a certified individual.

'Board' means that board appointed for Plumbers and Gas Fitters for the purpose of reviewing code interpretations taken by the building code enforcement division, granting variances from the code reviewing license applications and license suspensions and revocation.

'Code' means the MABCD Plumbing Code and Article 3 of this Code, as adopted by the MABCD.

'Direct supervision' means that the apprentice is limited to the same structure and/or building site as the journeyman or master plumber, except in the case of one and two-family residential development, where the apprentice may be on the job site within five hundred (500) feet of where the journeyman or master is working.

'Field Experience' means working under the direct supervision of a person having a valid Journeyman Plumber or Master Plumber certificate or attending trade related schooling. No more than one year of the requirement may be satisfied by trade related schooling. Schooling shall consist of a minimum of nine hundred thirty (930) program hours documented by a certificate of completion.

'Journeyman Gas Fitter' means a person who has been approved by the MABCD showing that individual to be qualified to do gas piping, make repairs to gas piping systems or in any work at the trade of gas piping for a Licensed Contractor. That individual shall have a current certificate showing him or her to be so qualified.

'Journeyman Plumber' A journeyman plumber is a person who has been approved by the MABCD showing that individual to be qualified to do plumbing or gas piping, venting work, and work at the trade of plumbing and gas piping for a Licensed Contractor. That individual shall have a current certificate showing him or her to be so qualified. A Journeyman Plumber is

deemed to be a Journeyman Gas Fitter, Journeyman Drain Layer, Journeyman Lawn Irrigation, Journeyman Sewer Cleaner and certified Water Conditioning Installer by definition.

'Licensed Contractor' means a person, firm, partnership, corporation, limited liability company, association or combination thereof, that has acquired a plumbing, gas fitter, lawn irrigation, drain laying, or certified Water Conditioning license from the MABCD, who undertakes or offers to undertake for another, for hire, the planning, laying out, supervising and installing or making additions, alterations, and repairs in the installation of plumbing, drains, gas fittings, lawn irrigation or plumbing systems.

'Licensed Trade' or 'trade' means the mechanical, electrical, plumbing or gas fitting trade, as the context of this Code may require.

'Master Gas Fitter' means a person who has been approved by the MABCD showing that individual to be qualified to engage in the business of gas piping systems and who has a current certificate showing him or her to be so qualified.

'Master Plumber' means a person who has been approved by the MABCD showing that individual to be qualified to engage in the business of plumbing and gas piping, the installation of plumbing and gas fixtures and appliances, and who has a current certificate showing him or her to be so qualified. A Master Plumber is deemed to be a Master Gas Fitter, Master Drain Layer, Master Lawn Irrigation, Master Sewer Cleaner and Certified Water Conditioning installer by definition.

'Qualified Master' means an individual who holds a master certificate issued pursuant to this Code evidencing such person to be qualified to control and have authority of all technical work performed under the authority of the licensed contractor's enterprise, and assures quality control and is responsible for complying with all applicable laws, codes and regulations. An individual shall not be the Qualified Master for more than one licensed contractor's enterprise unless such individual receives approval from the Director of the MABCD or an authorized representative thereof and approved by the Board.

Sec. 3.1.055. - Use of License to Obtain Permits for Another.

Licensed Contractors are prohibited from pulling permits for other persons to complete work for which this Code requires the Licensed Contractor, as the permit holder, to be the party to complete the work.

Sec. 3.1.058. -Requirement to Obtain Permit.

All persons who install, remove, alter, repair or replace or cause to be installed, removed, altered, repaired or replaced, any plumbing, gas or drainage piping work or fixture or water heating or treating equipment in a building or premises shall be required to obtain the proper permit from the MABCD in order to do such work.

Sec. 3.1.060- Sleeves.

Section 312.10 of the Uniform Plumbing Code is amended to read as follows: Sleeves shall be provided to protect all piping through concrete and masonry walls, or concrete floors.

Exceptions:

- (1) Sleeves shall not be required where openings are drilled or bored; and
- (2) sleeves shall not be required for DWV pipes going through concrete basement floors or slab on grade.

Sec. 3.1 .070-Test Gauges.

Section 318.0 of the Uniform Plumbing Code is amended to read as follows: In performing the prescribed piping tests as required elsewhere in this Code, a spring type gauge may be used provided the required maximum capacity of the gauge used for the ten (10) psi, for fifteen (15) minutes test, be thirty (30) psi and the required maximum capacity of the spring type gauge used for the sixty (60) psi, for thirty (30) minutes test, be one hundred (100) psi.

Sec. 3.1.080- Drainage Connection.

Section 414.3 of the Uniform Plumbing Code is amended to read as follows: Commercial dishwashing machines shall discharge indirectly through an air gap or direct connection in accordance with section 704.3 with floor drain protection.

Sec. 3.1.085-Minimum Plumbing Fixtures.

Section 422.0 of the Uniform Plumbing Code is amended to read as follows: Minimum Number of Plumbing Fixtures shall be in accordance with MABCD's current adopted version of the International Building Code - (Table 2902.1) and all amendments thereto as adopted into the Wichita-Sedgwick County Unified Building and Trade Code.

Sec. 3.1.090- Backflow Prevention Devices, Assemblies and Methods.

Section 603.1 of the Uniform Plumbing Code is amended to read as follows: No person shall install any water-operated equipment or mechanism, or use any water treating chemical or substance, if it is found that such equipment, mechanism, chemical or substance may cause pollution or contamination of the domestic water supply. Such equipment or mechanism may be permitted only when equipped with an approved backflow prevention device. In addition to the general requirements of Section 603.0, Cross Connection Control, Backflow prevention devices and methods shall conform to Title 17.10 of the Code of the City of Wichita. Registration of backflow testers and test reporting is required by the Authority Having Jurisdiction over backflow testing. Test reports must be maintained by the testing provider and supplied to the Authority Having Jurisdiction, and the backflow device owner. Where, in any specific case, sections of this Code specify different material, methods of construction or requirements in conflict with other local laws or ordinance, the most restrictive shall govern.

Sec. 3.1.100 - Protection from Lawn Sprinklers and Irrigation Systems.

Section 603.5.6 of the Uniform Plumbing Code is amended to read as follows: Potable water supplies to systems having no pumps or connections for pumping equipment and no chemical injection or provisions for chemical injection, shall be protected from backflow by one of the following devices: (1) Pressure vacuum breaker, (2) Spill-resistant vacuum breaker, (3) Reduced-pressure backflow preventer, or (4) air gap.

Sec. 3.1.110 - Backflow Device Downstream from a Potable Water Supply Pump.

Section 603.5.6.2 of the Uniform Plumbing Code is amended to read as follows: Where systems have a device installed downstream of a potable water supply pump or a potable water supply pump connection, the device shall be one of the following: (1) Pressure vacuum breaker, (2) Spill resistant vacuum breaker, (3) Reduced-pressure backflow preventer, or (4) air gap.

Sec. 3.1.120 - Deck-Mounted and Equipment-Mounted Vacuum Breakers.

Section 603.5.13 of the Uniform Plumbing Code is amended to read as follows: Deck-mounted or equipment-mounted vacuum breakers shall be installed in accordance with their listing and the manufacture's installation instructions, with the critical level not less than six (6) inches (15.24 cm) above the flood-level rim.

Sec. 3.1.130 - Protection from Fire Systems.

Section 603.5.14.2 of the Uniform Plumbing Code is amended to read as follows: Where contaminant chemicals (ethylene glycol, corrosion inhibitors, or other chemicals) are added to a fire protection system supplied from a potable water supply, the potable water system shall be protected by one of the following: (1) Reduced pressure backflow preventer, or (2) Reduced pressure detector assembly. Fire protection systems using low hazard materials must be protected with appropriate protection and clearly labeled per NFPA requirements with MSDS documentation permanently maintained at the backflow device. Devices approved for low hazard potable water system protection include the following: (1) Double check backflow preventer, and (2) Double check detector assembly.

Sec. 3.1.140 - Excessive Water Pressure.

Section 608.2 of the Uniform Plumbing Code is amended to read as follows: Where static water pressure in the water supply piping is in excess of one hundred (100) psi, an approved type pressure regulator preceded by an adequate strainer shall be installed and the static pressure reduced to one hundred (100) psi or less. Such regulator(s) shall control the pressure to all water outlets in the building unless otherwise approved by the administrative authority. Each such regulator and strainer shall be accessibly located aboveground or in a vault equipped with a properly sized and sloped bore-sighted drain to daylight, shall be protected from freezing, and shall have the strainer readily accessible for cleaning without removing the regulator or strainer body or disconnecting the supply piping. All pipe size determinations shall be based on eighty percent (80%) of the reduced pressure when using Table 610.4

TABLE 604.1
MATERIALS FOR BUILDING SUPPLY AND WATER DISTRIBUTION PIPING AND FITTINGS

MATERIAL	BUILDING SUPPLY PIPE AND FITTINGS	WATER DISTRIBUTION PIPE AND FITTINGS	REFERENCED STANDARD(S) PIPE	REFERENCED STANDARD(S) FITTINGS
Copper and Copper Alloys	X	X	ASTM B42. ASTM B43. ASTM 875, ASTM 888. ASTM B16.1, ASTM B16.2 ASTM B302, ASTM B447	ASME B16.15. ASME B16.18. ASME B16.22. ASME B16.26. ASME B16.51
CPVC	X	X	ASTM D2846, ASTM F44 I. ASTM F442, CSA B137.6	ASTM D2846. ASTM F437. ASTM F438. ASTM F439. ASTM F1970. CSA B137.6
CPVC-AL-CPVC	X	X	ASTM F2855	ASTM D2846
Ductile-Iron	X	X	AWWAC151	ASME B16.4. AWWA C110. AWWAC153
Galvanized Steel	X	X	ASTMA53	-
Malleable Iron	X	X	-	ASME B16.3
PE**	X	** -	ASTM D2239. ASTM D2737. ASTM D3035, AWWA C901, CSA B137.1	ASTM D2609. ASTM D2683. ASTM D3261. ASTM F1055. CSA B137.1
PE-AL-PE	X	X	ASTM F1282. CSA B137.9	ASTM F1282. ASTM F1974. CSA B137.9
PE-RT	X	X	ASTM F2769	ASTM F1807. ASTM F2098. ASTM F2159. ASTM F2735. ASTM F2769
PEX	X	X	ASTM F876. ASTM F877. CSA B137.5. AWWA C904*	ASME B16.1. ASTM F877. ASTM F1807. ASTM F1960. ASTM F1961. ASTM F2080. ASTM F2159. ASTM F2735. CSA B137.5

Sec. 3.1.150, TABLE 604.1, MATERIALS FOR BUILDING SUPPLY AND WATER DISTRIBUTION PIPING AND FITTINGS. The following footnote has been added to Table 604.1; **Polyethylene (PE) water service piping may extend inside a structure to the building master shut off valve; provided there are no branches taken off ahead of the building master shut off valve.

Sec. 3.1.160 - Installation.

Section 609.1 of the Uniform Plumbing Code is amended to read as follows: All water piping shall be adequately supported in accordance with Section 313.0, Table 313.L and to the satisfaction of the administrative authority. Burred ends shall be reamed to the full bore of the pipe.

Changes in direction shall be made by the appropriate use of the fittings, except that changes in direction in copper tubing may be made with bends having a radius of not less than six (6) diameters of the tubing, providing that such bends are made with bending equipment that

does not deform or create a loss in the cross-sectional area of the tubing. Changes in direction are allowed with flexible pipe and tubing without fittings in accordance with the manufacturer's installation instructions. Provisions shall be made for expansion in hot water piping.

The depth of a water service line shall be at least thirty-six (36) inches below finished grade. Such service shall be not less than five (5) feet from any tree on public property (repair or replacement of an existing service is exempt from this requirement). The water service pipe shall be laid in a ditch separate from other underground pipes or conduits. There shall be not less than eighteen (18) inches of solid undisturbed earth between water service pipes and other underground pipes and conduits. All piping, equipment appurtenances and devices shall be installed in a workmanlike manner in conformity with the provisions and intent of this Code.

Sec. 3.1.170 - Solvent Welding.

Section 705.5.2 of the Uniform Plumbing Code is amended to read as follows: Plastic pipe and fittings designed to be joined by solvent cementing shall comply with the manufacturer's installation instructions and the following.

PVC pipe and fittings must be cleaned and joined with primer(s) and solvent cement(s).

Non-pressure PVC pipe and fittings may be joined without primer by using a medium body, one step cement that must be listed by the cement manufacturer for use without primer and so stated on the label.

Sec. 3.1.180 - Discharge Line

Section 710.4 of the Uniform Plumbing Code is amended to read as follows: The discharge line from such ejector, pump, or other mechanical device shall be of approved material and be provided with an accessible backwater or swing check valve and gate or ball valve. Where the gravity drainage line to which such discharge line connects is horizontal, the method of connection shall be from the top through a wye branch fitting. The gate or ball valve shall be located on the discharge side of the backwater or check valve.

Gate or ball valves, where installed in drainage piping, shall be the fullway type with working parts of corrosion-resistant metal. Sizes four (4) inches (100 mm) or more in diameter shall have cast-iron bodies, and sizes less than four (4) inches (100mm), cast-iron or copper alloy bodies.

Sec. 3.1.190 - Media.

Section 712.1 of the Uniform Plumbing Code is amended to read as follows: The piping of the plumbing, drainage, and venting systems shall be tested with water or air. The Authority Having Jurisdiction, as defined in the Uniform Plumbing Code, may require the removal of any cleanouts, etc., to ascertain whether the pressure has reached all parts of the system. When the temperature wherein the drainage system is located is above twenty degrees (20°) Fahrenheit, a water test as set forth in Section 712.2 may be made. After the plumbing fixtures have been set and their traps filled with water, they shall be submitted to a final test.

NOTE: Chapter 7, Part II Building Sewers is deleted and sewers are regulated by Wichita's "Title 16.

Sec. 3.1.200 - Indirect Waste Receptors.

Section 804.1 of the Uniform Plumbing Code is amended to read as follows: All plumbing fixtures or other receptors receiving the discharge of indirect waste pipes shall be approved for the use proposed, shall be of such shape and capacity as to prevent splashing or flooding, and shall be located where they are readily accessible for inspection and cleaning. No indirect waste receptor shall be installed in any toilet rooms, closet, cupboard or storeroom, nor in any other portion of a building not in general use by the occupants thereof, except standpipes for clothes washers may be installed in toilet and bathroom areas when the clothes washers are installed in the same room. Clothes washers shall not be installed so as to discharge into any gravity line higher than sixty (60) inches above its base. The clothes washer standpipe shall be a minimum length of eighteen (18) inches above the trap and the inlet of the standpipe no higher than sixty (60) inches above the floor. In any structure where drains indirect waste receptors are to be installed in or flush with the floor, they these receptors may be floor sinks or floor drains, and shall be readily accessible, provided floor drains. Floor drains used as indirect waste receptors shall meet the following requirements:

1. Have a reservoir capacity a minimum of four (4) inches in diameter and two (2) inches deep;
2. Have a perforated cover equal in area to the diameter of the drain;
3. Have a minimum trap and waste line size of two (2) inches in diameter; and
4. The indirect waste line shall maintain a two (2) inch air gap.

Section 3.1.210 - Point of Discharge.

Section 814.5 of the Uniform Plumbing Code is amended to read as follows: Air-conditioning condensate waste pipes shall connect indirectly, except where permitted in section 814.6, to the drainage system through an air gap or air break to properly trapped and vented receptors, dry wells, leach pits, or the tailpiece of plumbing fixtures. When a fixture tail piece is used for condensate waste, the air gap or air break fitting shall be located no less than six (6) inches above the flood level rim of the fixture served by the tail piece.

A condensate drain line shall be trapped in accordance with the appliance manufacturer's instructions or as approved.

Section 3.1.220 - Condensate Waste From Air-Conditioning Coils.

Section 814.6 of the Uniform Plumbing Code is amended to read as follows; Where the condensate waste from air-conditioning coils discharges by direct connection to a lavatory tailpiece or to an approved accessible inlet on a bathtub overflow, the connection shall be located in the area controlled by the same person controlling the air-conditioned space. The flood level

rim of the condensate collection device shall be located no less than six (6) inches above the flood level rim of the fixture served by the tail piece.

Section 3.1.230 - Vent Termination

Section 906.1 of the Uniform Plumbing Code is amended to read as follows; Roof Termination. Each vent pipe or stack shall extend through its flashing and shall terminate vertically not less than six (6) inches (152mm) above the roof not less than one (1) foot (305mm) from the vertical surface.

Exception:

Extension through the wall. With prior approval of the authority having jurisdiction, vent terminals through a wall shall be allowed as an alternative method on residential plumbing remodels where other structural issues make it impractical to install a roof termination without remodeling other areas of the structure. Vent terminals extending through the wall shall terminate at a point not less than ten (10) feet (3048mm) from a lot line and not less than ten (10) feet (3048mm) above average ground level. Vent terminations shall not terminate under an overhang of a structure with soffit vents. Side wall vent terminals shall be protected to prevent birds or rodents from entering or blocking the vent opening.

Sec 3.1.240 - Wet Venting.

Section 908.0 of the Uniform Plumbing Code is amended to read as follows: Groups of fixtures on the same floor may be wet or stack vented provided that:

- (1) The maximum distance from the vent intersection with the waste or soil pipe to the dip of the trap shall be in accordance with Table 1002.2.
- (2) Not more than one fixture unit wastes into a one and one-half (1 1/2) inch diameter wet vent. Not more than four (4) fixture units shall waste into a two (2) inch diameter (excluding urinals) or nine (9) fixture units into three (3) inch or larger diameter wet vent.
- (3) Excepting floor drains, no fixtures shall waste into such stack below the closet fixture opening without a proper vent.
- (4) The limit of a horizontal wet vent shall be ten (10) feet developed length.
- (5) A wet vent receiving the discharge from a clothes washer can only be used to wet vent a water closet. The vent intersection shall be no closer than four (4) feet total developed length from the top of the closet flange.

Section 3.1.250- Circuit Venting, Top Floor Option is created to read as follows:

Section 3.1.250- Circuit Venting, Top Floor Option

When a circuit vent is installed on a top floor, the circuit may loop to the stack vent. Also, the stack vent may be used as the required relief vent

Section 3.1.260 - Air Admittance Valves is created to read as follows:

Section 3.1.260 - Air Admittance Valves

Air admittance valves shall be allowed as an alternative method on residential plumbing renovations and repairs where structural issues make it impractical to install a conventional vent without remodeling other areas of the structure. Vent systems using air admittance valves shall comply with this Section, including the following requirements:

- (1) Individual and branch-type air admittance valves shall conform to ASSE 1051.
- (2) The valves shall be installed in accordance with the requirements of this Section and the manufacturer's instructions. Air admittance valves shall be installed after the DWV testing required by Sections 105.0 and 712.0 of the Uniform Plumbing Code has been performed.
- (3) Individual vents and branch type air admittance valves shall vent only fixtures that are on the same floor level and connect to a horizontal branch drain.
- (4) Individual and branch air admittance valves shall be located not less than four (4) inches above the horizontal branch drain or fixture drain being vented. The air admittance valve shall be located within the maximum developed length permitted for the vent. The air admittance valve shall be installed not less than six (6) inches above insulation materials when installed in attics.
- (5) Access shall be provided to air admittance valves. Such valves shall be installed in a location that allows air to enter the valve.
- (6) Air admittance valves shall not be located in spaces utilized as supply or return air plenums.
- (7) The air admittance valve shall be rated for the size of the vent to which the valve is connected
- (8) Each plumbing system shall be vented by one or more vent pipes extending outdoors to the open air, and the aggregate cross-sectional area of which shall be not less than that of the largest required building sewer, as stated in 904.1 of the Uniform Plumbing Code.
- (9) Air admittance valves shall not be used to vent sumps or tanks except where the vent system for the sump or tank has been designed by an engineer.

- (10) A permanent, visible label shall be attached to the panel, enclosure, or trap of the fixture being served stating "AIR ADMITTANCE VALVE INSTALLED".

Section 3.1.270 - TABLE 1002.2

Table 1002.2 of the Uniform Plumbing Code is amended to read as follows:

Table 1002.2
Horizontal Lengths of Trap
Arms
(Except for water closets and similar fixtures)*

Trap arm pipe diameter (inches)	distance Trap to vent minimum (inches)	length maximum (inches)
1 1/4	2 1/2	30
1 1/2	3	42
2	4	72
3	6	72
4	8	120
Exceeding 4	2 x Diameter	120

For SI units: 1 inch= 25.4 mm

Provided that the distance for floor drains shall be within fifteen (15) feet of a ventilated line and the distance for bathtubs with one and one-half (1 ½) inch waste shall be within five (5) feet of a vent.

For trap arms three (3) inches in diameter and larger, the change of direction shall not exceed one hundred and thirty-five (135) degrees without the use of a cleanout.

*The developed length between the trap of a water closet or similar fixture (measured from the top of the closet ring (flange) to inner edge of vent) and its vent shall not exceed six (6) feet.

Section 3.1.280 - Rough Piping Inspection.

Section 1203.3.1 of the Uniform Plumbing Code is amended to read as follows: A rough piping inspection shall be made after all gas piping authorized by the permit has been installed, and before any such piping has been covered or concealed, or any fixture or appliance has been attached thereto. This inspection shall include a determination that the gas piping size, material and installation meet the requirements of this Code.

When installing any gas opening for a future gas burning appliance in residential gas piping systems, it shall be sized and located according to the following requirements:

1. The future appliance shall be assigned a minimum fifty-five thousand (55,000) BTU value for sizing the gas distribution piping system;
2. For future solid fuel burning fireplaces, the gas opening shall be run to within four (4) feet of the fire box and be controlled by an accessible approved shut-off valve outside the hearth and be properly capped or plugged;
3. For future gas fired appliances, the gas opening shall be run to within three (3) feet of the appliance and be controlled by a readily accessible approved shut-off valve outside the hearth and be properly capped or plugged;
4. The approved required shut-off valve shall be outside of each appliance or fireplace and ahead of the union connection and in addition to any valve on the appliance;
5. When creating a new opening all gas piping must be tested in accordance with this Code.
6. When extending an existing gas opening, only that branch must be tested in accordance with this Code. When making a gas opening at the meter loop, only that branch must be tested in accordance with this Code.

Exception: When approved by the administrative authority, above procedures may be waived and a soap test administered.

Sec. 3.1.290 - Corrugated Stainless Steel.

Section 1208.5.3.4 of the Uniform Plumbing Code is amended to read as follows: Corrugated stainless steel tubing shall be tested and listed in accordance with the construction, installation, and performance requirements of CSA LC-1. [NFPA 54:5.6.3.4]. In addition, corrugated stainless steel tubing shall be coated with an electrically conductive jacket compliant with the listing standard of ANSI LC-1/CSA 6.26 - 2014.

Sec. 3.1.300 - Installation of Gas Piping

Section 1210.2 of the Uniform Plumbing Code. is amended to read as follows:

All exposed piping installed outdoors shall be elevated not less than three and one half (3-1/2) inches above grade.

Gas piping shall enter or exit the structure above the finish grade, and threaded steel gas piping shall be installed with a swing joint located where the gas piping enters or exits the structure. A "swing joint" means a joint in a threaded pipeline which permits motion in the line in a plane normal to the direction of one part of the line.

Where installed across roof surfaces, gas piping shall be elevated not less than three and one-half (3Yz) inches above the roof surface. Piping installed above ground, outdoors, and installed across the surface of roofs shall be securely supported and located where it will be protected from physical damage. Where passing through an outside wall, the piping shall also be

protected against corrosion by coating or wrapping with an inert material approved for such applications. The piping shall be sealed around its circumference at the point of the exterior penetration to prevent the entry of water, insects, and rodents. Where piping is encased in a protective pipe sleeve the annular space between the gas piping and the sleeve shall be sealed at the wall to prevent the entry of water, insects, or rodents. [NFPA 54: 6.2.1]

Sec. 3.1.310-Bonding of CSST Gas Piping.

Section 1211.2 of the Uniform Plumbing Code, is created to read as follows:

CSST gas piping systems shall be bonded to the electrical service grounding electrode system. The bonding jumper shall connect to a metallic pipe or fitting between the point of delivery and the first downstream CSST fitting. The bonding jumper shall be not smaller than 6 AWG copper wire or equivalent. Gas piping systems that contain one or more segments of CSST shall be bonded in accordance with this section. [NFPA 54- 12:7.13.2].

Exception: This bonding requirement may be eliminated if the CSST is compliant with the listing standard of ANSI LC-1/CSA6.26 - 2014, and the manufacturer's installation instructions for the specific product states that additional bonding is not required.

Sec. 3.1.320 - Installation - LPG.

Section 1212.10.1 of the Uniform Plumbing Code. is created to read as follows: In areas where natural gas is available for use as a fuel gas, it shall be used as the primary source for fuel gas for R-1, R-2, R-3, and R-4 type occupancy.

Sec. 3.1.322 - Equipment Burning - LPG.

Section 1212.10.2 of the Uniform Plumbing Code. is created to read as follows: Equipment burning liquefied petroleum gas (LPG) or liquid fuel shall not be located in a pit, an under-floor space, below grade or similar location where vapors or fuel might unsafely collect unless an approved method for the safe collection, removal and containment or disposal of the vapors or fuel is provided.

Exception: Equipment burning liquefied petroleum gas (LPG) that is equipped with an automatically controlled gas valve may be installed below grade of a R-1, R-2, R-3, or R- 4 type occupancy, provided that each area where said appliance(s) are located is equipped with a listed, labeled and approved liquefied petroleum gas detection alarm. Detectors shall sound an alarm audible in all areas of the structure and be installed per manufacturers installation instructions.

Sec. 3.1.324- Sump Pump - LPG.

Section 1212.10.3 of the Uniform Plumbing Code, is created to read as follows: Only submersible type sump pumps will be acceptable for structures with LPG service.

Sec. 3.1.326-Log Lighter Valve - LPG.

Section 1212.10.4 of the Uniform Plumbing Code, is created to read as follows: No LPG log lighter valve shall be allowed to be installed below grade, but they shall be allowed on the main floor with a maximum 50 gallon LPG tank no closer than three (3) feet to a structure. LPG tank must be secured. Valves and fittings must be listed for LPG.

Sec. 3.1.330 - Building Code Provisions.

The provisions of Article 2 of this Code shall apply to the construction, alteration, movement, 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.

Sec. 3.1.340 - Electrical.

The provisions of Article 4 of this Code shall apply to the installation of electrical systems, including alterations, repairs, replacement equipment. appliances, fixtures, fittings and appurtenances thereto.

Sec. 3.1.350 - Mechanical.

The provisions of Article 5 of this Code shall apply to the installation of vents, combustion air, ventilation, mechanical systems, system components, equipment and appliances applied within HVAC systems.

Sec. 3.1.360 - Fire Prevention.

The provisions of Title 15 of the Code of the City of Wichita for matters within the jurisdiction of the City of Wichita and Chapter 12 of the Sedgwick County Code for matters within the jurisdiction of Sedgwick County shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of alarm systems and fire hazards in the structure or on the premises.

Sec. 3.1.370 - Apprentice Limitations.

Apprentices shall be permitted to work when accompanied by and under the direct supervision of a Master or Journeyman Plumber, who shall be responsible for the plumbing work done by the Apprentice. There shall be a maximum of four (4) Apprentices per one Master or Journeyman

Plumber. The on-site Master or Journeyman shall be responsible for maintaining the ratio of Master/Journeyman Plumbers to Apprentices as required by this Section. If an Apprentice works without the required direct supervision, the Qualified Master, on-site Master or Journeyman Plumber, and/or the Apprentice may be held responsible for violation of this Code.

Sec. 3.1.380 - Applicant Requirements, Examinations; Issuance of Certificates.

Any person desiring to engage in or work at the business of plumbing, plumbing repair, lawn irrigation, water conditioning, gas fitter, or to do such work, shall submit the prescribed application form to the MABCD for a certificate, and if applicant meets the following requirements or is approved by the Board, shall at such time and place as directed be subjected to an examination as to their qualifications. The qualifications are as follows:

- a. A minimum score of seventy-five (75) percent on the "Block Examination" Master/Journeyman Plumbing Certificate, which is administered by Prometric, or
- b. A minimum score of seventy-five (75) percent on the International Code Council Examination for a Master/Journeyman Plumbing Certificate, which is administered by International Code Council; or
- c. A satisfactory score on any other standard examination to determine the qualification of a Master/Journeyman Plumbing that is approved and adopted by the State of Kansas, pursuant to state law, following the effective date of this Code. Applicant requirements:

Journeyman Plumber: two (2) years documented Field Experience.

Master Plumber: two (2) years as Journeyman Plumber or four (4) years documented Field Experience.

Journeyman Gas Fitter: two (2) years documented Field Experience.

Master Gas Fitter: two (2) years as Journeyman Plumber or four (4) years documented Field Experience.

Journeyman Drain Layer: two (2) years documented Field Experience.

Master Drain Layer: two (2) years as Journeyman Plumber or four (4) years documented Field Experience.

Journeyman Lawn Irrigation: two (2) years documented Field Experience.

Master Lawn Irrigation: two (2) years as Journeyman Plumber or four (4) years documented Field Experience.

Note: For Journeyman Plumber requirements an applicant may use completion of a technical or trade related school for one (1) year of the required two (2) years. The schooling shall consist of a minimum of nine hundred thirty (930) program hours documented by a certificate of completion.

Sec. 3.1.390 - Fees for Examination and Certificates, Renewing, and Continuing Education Requirements.

(a) The fee for each examination and original certificate of a Master Plumber, Journeyman Plumber, Master Drain Layer, Journeyman Drain Layer, Master Lawn Irrigation, Journeyman Lawn Irrigation, Master Water Conditioning, certified Water Conditioning Installer, Master Gas Fitter or Journeyman Gas Fitter shall be established by the Director of the MABCD to cover the administrative costs of issuing such certificates. This fee shall be paid to the MABCD when the application for a certificate is made. Individuals not holding a certificate at the beginning of the certificate cycle, who obtain a certificate during such certificate cycle by the standardized test required by K.S.A. 12-1508 and any amendments thereto, will be issued the initial certificate without documentation of continuing education. Such certificate will be issued noting the test provider, specific test type and grade. Such test shall be completed during the certificate cycle. All such certificates shall expire on December 31st of each odd numbered year. The biennial fee for all certificates shall be established by the Director of the MABCD to cover the administrative cost of issuing such certificates. All such certificates shall be renewed biennially upon payment established by the Director of the MABCD to cover the administrative costs of issuing such certificates. All certificates shall expire on December 31st of each odd-numbered year and no reduction shall be made for part of the year being elapsed. Any holder of a certificate who fails to renew the same by March 1st after its expiration shall be required to submit one of the following: (1) Proof of completing a new examination in accordance with K.S.A. 12-1508; or (2) proof of completing an additional one and one-half (1-1/2) hours of continuing education hours, pursuant to K.S.A. 12-1509, for each three (3) month period the renewal is late and only when the original certificate was issued pursuant to K.S.A. 12-1508. It is the total responsibility of the certificate holder to assure that his/her certificate has been renewed and is valid.

(b) Individuals passing the examination in the first year of a renewal cycle will need to provide documentation of twelve (12) hours of approved continuing education when renewing their certificate. Not less than six (6) hours shall consist of plumbing code education. The continuing education shall be attended during the certificate cycle. Individuals passing the examination in the second year of a renewal cycle will need to provide documentation of six (6) hours approved continuing education when renewing their certificate. Not less than three (3) hours shall consist of plumbing code education. The continuing education shall be attended during the second year of the certificate cycle. Individuals with an active certificate that passed the examination prior to the first year of the renewal cycle must provide written proof of having completed biennially not less than twelve (12) hours of continuing education approved by the MABCD. Not less than six (6) hours shall consist of plumbing code education. Continuing education shall be provided by the MABCD or a nationally recognized trade association, community college, technical school, technical college or other provider approved by the MABCD. All twelve (12) hours of education 160 shall comply with the MABCD's continuing education guidelines for plumbing.

Sec. 3.1.400 - Licenses.

Any person engaging or desiring to engage in the business of plumbing, plumbing

repair, drain laying, lawn irrigation, water conditioning, gas fitting or gas fitting repair shall, before obtaining any permit or transacting any business, obtain a license therefore from the Director of the MABCD, which license shall All certificates shall expire on December 31st of each odd- numbered year.

Sec. 3.1.410 - Certain Persons Exempt from License Requirements.

Any person, corporation, business, government entity or similar entity not engaged in the business of plumbing within the scope of this Code who has in his/her regular and permanent employment a person or persons who possess a current and valid journeyman or master plumbing certificate shall be permitted to have such person or persons perform maintenance and repair work, that does not require a permit, on buildings and premises that are owned, leased, operated or managed by him/her shall be exempt from this Code, as pertains to licenses but shall be subject to all other requirements pertaining to this Code.

Sec. 3.1.420 - Revocation of Certificates and Licenses.

The Board is authorized to cancel and recall any certificate or license obtained in accordance with the provisions of Article 3 of this Code for any or all of the following reasons:

1. Abandonment of any contract without legal cause; or
2. Diversion of funds or property received for performance or completion of a specific contract, or for a specific purpose in the performance or completion of any contract, and the application or use for any other contract, obligation or purpose, or the failure, neglect or refusal to use such funds or property for the performance or completion of such contract; or
3. Violation of any provisions of this Code or the failure or refusal to comply with any lawful order of the administrative authority; or
4. Misrepresentation of a material fact by the applicant in obtaining a license; or
5. The failure of any such master plumber, master gas fitter, master drain layer, master lawn irrigation, master water conditioning, journeyman plumber, journeyman gas fitter, journeyman drain layer or journeyman lawn irrigation, journeyman water conditioning to fully satisfy all claims for labor and materials used in the performance of any work for which he has been engaged and for which he has been paid; or
6. Use of a license to obtain permits for another; or
7. Carelessness or negligence in providing safety measures for the protection of workmen and the public; or
8. Failure to obtain permits or schedule required inspections; or

9. Unreasonable delay in the performance and carrying out of any contract; or
10. A Qualified Master who allows or permits an uncertified individual to engage in the business of plumbing, plumbing repair, lawn irrigation, water conditioning, or gas fitting; or
11. Any person who installs, removes, alters, repairs or replaces or causes to be installed, removed, altered, repaired or replaced, any plumbing, gas or drainage piping work or fixture or water heating or treating equipment in a building or premises without first obtaining the proper permit to do such work from the MABCD; or
12. Failure to obtain an excavation permit from the department of public works-engineering prior to performing any excavation work on public property within the City limits of the City of Wichita, and said permit to be obtained in accordance with the terms of Chapter 10.20 of the Code of the City of Wichita, or who fails to obtain a separate permit for each building or structure or for any additional work other than authorized in the permit; or
13. A licensed contractor who allows another person, to do or cause to be done any work under a permit secured by said contractor except those persons in his employment.

Sec. 3.1.430 - Owner Occupants--Minor Repairs.

Regardless of the requirements of other sections of this Code, the owner-occupant of a single-family dwelling may obtain permits to repair, replace, or maintain the existing plumbing systems in such single-family dwelling and the usual accessory buildings in connection with such dwelling; provided, however, that the owner-occupant shall perform all such work and that the work so performed is in accordance with this Code as verified by an inspection requested by such owner-occupant and performed by the MABCD. No permit shall be required for minor repairs or alterations which do not exceed two hundred dollars (\$200.00) as the price charged for such work, but such work shall comply with all requirements of this Code.

Sec. 3.1.440 - Owner-Occupants Permit, Fee, Examination, and Requirements.

The owner-occupant of a detached single-family dwelling occupied or to be occupied by the owner-occupant applying for the permit may be permitted to install plumbing systems in the main structure and accessory structures thereto provided all materials are purchased and all labor is performed by the applicant. Owner-occupants applying for permits for installations as outlined above shall first qualify themselves by successfully passing an open book examination dealing with relevant provisions of this Code. Successful passage of the examination shall qualify the applicant for future permits until the time of adoption of another edition of the Code by the MABCD. Prior to permit approval, the applicant shall also submit a plan of the installation drawn in a format acceptable to and drawn in sufficient detail as to satisfy the Director of the MABCD of the overall Code compliance of the anticipated installation. Permit fees shall be as set forth elsewhere in this Code and in Article 2 provided, however, that each additional inspection owing to detected Code

deficiencies requiring correction shall be billed at the rate as determined by the Director of the MABCD. Permits for installations in completely new residences and/or total remodel permits shall be limited to one (1) in three (3) years to each applicant unless a waiver is obtained, upon written application, from the Board.

Sec. 3.1.450. Insurance Requirements. See Article 1.4(c) of this Code.

Sec. 3.1.460. Licensed Contractors--Established Place of Business Required. See Article 1.4(a) of this Code.

Sec. 3.1.470 - Licensed Contractors--Marking of Vehicles. See Article 1.4(b) of this Code.

Sec. 3.1.480-Truth in Advertising Requirements. See Article 1.4(d) of this Code.

Article 3, Section 2 -PREFABRICATED ASSEMBLIES

Sec. 3.2.010 - Definitions.

The following definitions shall apply in the interpretation of this section:

1. "Prefabricated assembly" means a structural unit, the integral parts of which have been built up or assembled prior to incorporation in the building or to being erected as a building unit.
2. "Approved agency" means an established and recognized agency regularly engaged in conducting tests or furnishing inspection services.

Sec. 3.2.020 - Certificates of Approval.

A certificate of approval by an approved agency shall be furnished with every prefabricated assembly, except where the assembly is readily accessible to inspection at the site. The certificate of approval shall certify that the assembly in question has been inspected and meets the requirements of Article 3 of this Code.

Sec. 3.2.030 - Field Erection.

Placement of prefabricated assemblies at the building site shall be inspected by the plumbing inspector to determine compliance herewith.

Sec. 3.2.040 - Master Plumber's certificate or approved agency certification.

The installation of plumbing, house drainage, gas piping, fixtures and appliances within or on any

prefabricated assembly to be erected shall be performed under the supervision of a person who has secured a master plumber's certificate as approved by the Director of the MABCD when certified as defined in Sec. 3.1.280 of this Code.

Sec. 3.2.050 - Permit required.

Final connections of the plumbing and gas piping services to the prefabricated assembly shall be made by a licensed master plumber, and for each assembly placed within the MABCD jurisdiction, as applicable, he shall secure a permit according to Article 3 of this code.

ARTICLE 4 – NATIONAL ELECTRICAL CODE

Article 4, Section A - GENERAL PROVISIONS, ADMINISTRATION AND ENFORCEMENT

Sec. 4.A.010. - Board of electrical appeals—Composition.

There is authorized a board of electrical appeals which shall consist of the Director of the Metropolitan Area Building and Construction Department ("MABCD"), or the designee, who shall be secretary of the board, and seven other members as follows:

- (1) One master electrician (appointed by the City);
- (2) One master electrician (appointed by the County);
- (3) One journeyman electrician (appointed by the City);
- (4) One journeyman electrician (appointed by the County);
- (5) One elevator mechanic (appointed by the City);
- (6) One electrical engineer (appointed by the County);
- (7) One public-at-large member (appointed jointly).

The board shall elect its own chairman and make such rules as are necessary for the conduct of its business.

Sec. 4.A.020. - Board of electrical appeals—Promulgation of additional rules.

The board of electrical appeals shall have the following authority and duties.

- (1) The board of electrical appeals shall act as an arbitration board in deciding any question that may arise between the electrical inspector and any electrician, or between the electrical inspector and any other person aggrieved by a decision of the electrical inspector.
- (2) Where conditions exist on any electrical job which are not specifically provided for by this Code, or where it would be impracticable to follow its provisions, the board may grant a variance from the strict application of the provisions of this Code. The person or persons desiring such variance shall submit all data and information necessary or as may be required by the board to enable it to make its decision, and if after thorough study of the desired variance it determines that the granting of such request would not act in contravention to the welfare of the public, it shall have the authority to grant the variance.
- (3) The board of electrical appeals shall consider applications for the use of materials or methods of installation not specifically covered in this Code, or for a change in the grading or quality of materials or for a change in methods of installation as set forth in this Code and accept or reject the same as affording the same degree of safety, and performance as the materials or methods provided for herein. The board shall use established standards of

nationally recognized laboratories and research organizations in making its determination to accept or reject the application. The applicant shall submit to the board all necessary information as may be required by the board in order for it to make its determination, and any expense incurred for the payment of laboratory reports shall be borne by the applicant. If, after a thorough study of the application and upon the basis of such study, it is determined that the public interest would be best served, would not be detrimental to the welfare of the public and would afford the same degree of safety as elsewhere provided for in this Code, the board shall approve the application; or should it be determined that it is against public interest, would not afford the same degree of safety as elsewhere provided for in this Code, the board shall deny the application. The code official shall notify the applicant and other interested parties of the action in regard to the application.

Sec. 4.A.030. - Board of electrical appeals—Matters pertaining to electrical elevators.

Whenever the board of electrical appeals has under consideration matters pertaining to elevators, the elevator inspector having charge of elevator installation shall sit with the board and act in an advisory capacity.

Sec. 4.A.040. - Scope—Purpose.

In order to provide practical safeguards of persons and of buildings from hazards arising from, affecting or relating to the construction, installation, alteration, repair, renewal, use, location and maintenance of all electric wiring, appliances or devices for light, heat or power, and for other purposes, basic standards of installation, authority to regulate and control are established, except that this Code does not cover installations in mines, ships, railway cars, automotive equipment, or the installations or equipment employed by a railway, electric or communication utility in the exercise of its function as a utility, and located outdoors or in buildings used exclusively for that purpose.

Sec. 4.A.050. - Definitions.

In addition to the definitions given in this Section, words and terms used in this Code shall be as defined in the National Electrical Code as referred to and adopted in Article 4.1 of this Code.

"Approved" as used in reference to materials or methods of construction, means that which conforms to standards as set forth in Section 2.010 of this Code and that which meets the approval of the Director of the MABCD of electrical and elevator section or the board of electrical appeals as the result of tests and investigations made by recognized technical or scientific organizations.

"Building code," as used in this Code, means Article 2 of this Code.

"Code Official" as used in this Code, means the Director of the MABCD or designee(s) of electrical and elevator section.

"Electrical Contractor" is a person, firm or corporation licensed to bid, plan, layout, install and supervise the installation of electrical wiring, or the installation of electrical equipment, devices or apparatus for light, heat or power purposes in or on any building or premises.

"Person" means a natural person, his heirs, executives, administrators or assigns, and including a firm, partnership or corporation, its or their successors or assigns. Singular includes plural, male includes female.

Sec. 4.A.060. - Provisions not retroactive.

Except for safety, nothing in this Code shall require any change in the installation of any wiring or the construction or erection of any appliance or device which complied with the law prior to the enactment of this Code. Any wiring, appliance or device illegally erected or installed prior to the enactment of this Code shall be removed or brought into compliance with this Code within thirty days of the effective date hereof.

Sec. 4.A.080. - Electrical inspectors—Appointments—Duties.

All electrical inspectors shall have had a minimum of five (5) years of practical experience in this field as a Journeyman or Master and hold a current electrical certificate and shall be duly appointed pursuant to the requirements set forth by the Director of the MABCD. Persons in the employ of the MABCD who are duly certified as residential combination inspectors or residential electrical inspectors by the International Conference of Building Officials or by the International Code Council shall also be qualified as electrical inspectors for one and two-family residential structures and their accessory structures. Each inspector shall be duly appointed pursuant to the requirements set forth by the Director of the MABCD.

Sec. 4.A.090. - Electrical inspectors—Inspection of wiring.

The electrical inspector shall examine and approve all new, renewed, repaired, extended or altered installations of wiring before work is concealed and again inspect each job upon completion of the work. He shall not release for electrical energy any wiring or electrical equipment which does not meet the provisions of this Code.

Sec. 4.A.100. (80.27)- Electrical inspectors—Authority to issue written notices.

The electrical inspector shall issue a written notice for any failure to correct a violation of this code. Should any person, firm or corporation served by such notice fail or refuse to comply with the orders contained in the notice within the time specified therein, the electrical inspector shall have the authority to disconnect or cause to be disconnected any electrical wiring or equipment and/or such person, firm or corporation shall be subject to the penalties provided for in See Article 1.2 of this Code.

Sec. 4.A.110. - Electrical inspectors—Authority to disconnect electrical wiring.

The electrical inspector shall have the authority to disconnect or cause to be disconnected from electric energy, any electrical wiring or equipment in case of emergency or when necessary for the protection of life or property, and he shall order the discontinuance of electrical energy to any electrical wiring, device or equipment found to be dangerous to life or property and to hold such wiring, device or equipment out of service until the same is made safe and conforms to the standards set forth in this Code.

Sec. 4.A.120. - Electrical inspectors—Right of entry.

In order to carry out the provisions of this Code, the electrical inspectors shall have the authority during reasonable hours to enter any building or upon any premises in the discharge of their duties for the purpose of making inspections and tests of an installation of electrical wiring, device, appliance or equipment contained therein.

Sec. 4.A.130. - Liability of persons owning or installing electrical wiring.

This Code shall not be construed to relieve from liability or to lessen the responsibility of any person owning, controlling or installing any electrical wiring, equipment or device. The City of Wichita or Sedgwick County shall not be held as assuming any liability of any nature by reason of the inspection authorized in this Code or certificate issued, and no officer or employee charged with the enforcement of this Code shall be held personally liable for any damage that may accrue to persons or property as a result of any act required or committed in the discharge of his duties.

Article 4, Section 1 - CERTIFICATES, PERMITS AND LICENSES

Sec. 4.1.005. - Electrical license—Required.

It is unlawful for any person, firm or corporation to engage in the business of electrical contractor without having secured an electrical license from the Director of the MABCD.

Sec. 4.1.010. - Master and journeyman electricians' certificates—Required.

It is unlawful for any person to engage in the business of electrical contracting without first having secured a master electrician's certificate as provided for in this Code. The master electrician shall be responsible for all electrical work encompassed in the inspection requested by and/or on the permit issued to his company.

It is further unlawful for any person to engage in the trade or otherwise perform the act of installing electrical wiring or raceways for equipment, apparatus or devices for light, heat or power, or other purposes within or on any building or premises without first having secured a master electrician's certificate or a journeyman electrician's certificate as herein provided for and both be in the employ of a licensed electrical contractor. A holder of a residential wireman electrician's certificate may perform the act of installing any and all electrical wiring within or on one- and two-family dwellings only and must be in the employ of a licensed electrical contractor.

The following exception shall be allowed: Except as provided for in Sections 4.1.050 and 4.1.090 of this Code.

Sec. 4.1.015. - Apprentice electrician and/or electrical helper.

(a) Apprentice electricians or helpers shall be permitted to perform the act of or install any electrical work when he or she is on the job site with and under the supervision of a master, journeyman or residential wireman electrician certified and both be in the employ of a licensed electrical contractor. If an apprentice electrician or helper works without the required supervision, both the electrical contractor license holder and the apprentice electrician/helper shall be guilty of this offense.

(1) "Job site" is defined as the property that an individual permit is issued for.

(b) A numeric ratio of apprentices or helpers to certified master, journeyman or residential wireman electricians on any one job site shall not be greater than four apprentices and/or helpers for each certified electrician.

Sec. 4.1.020. - Electricians' certificates—Application—Examination.

Applications for examination for a master electrician's certificate or a journeyman electrician's certificate or a residential wireman electrician's certificate shall be made to the office of the MABCD. The fee for an examination for a master electrician, journeyman electrician or residential wireman electrician shall be established by the Director of the MABCD, to cover the administrative costs.

Applicants for master electrician examination shall provide written documented proof of having a valid journeyman electrician certificate for a minimum of two (2) years.

Applicants for journeyman electrician and residential wireman electrician shall provide written documented proof of at least two (2) years field experience in the electrical construction industry. "Field experience" means working under the direct supervision of a person having a valid journeyman certificate or master certificate or attending an accredited electrical trade school. No more than one (1) year of the requirement may be satisfied by trade related schooling. Schooling shall consist of a minimum of 930 hours classroom training. Documentation shall be the following:

Written letter on company letterhead from employer(s) stating job description and dates of employment and signed by a person qualified in the electrical trade; and

Copy of a transcript or attendance record from an accredited electrical trade school.

The electrical examination will be administered in accordance with K.S.A. 12-1525 and amendments thereto, with a minimum passing score of seventy-five percent (75%).

Sec. 4.1.025. - Electrician's certificates—Reciprocity.

Any person with written proof of successful completion of the required electrical master, journeyman or residential wireman electrician test pursuant to K.S.A. 12-1525 and amendments thereto, with a minimum score of seventy-five percent and with proof of having obtained, since January 1, 2006, not less than 12 hours biennially of continuing education approved by the MABCD, shall be issued the appropriate license by the Director of the MABCD or the designated representative. The MABCD shall establish a uniform fee to be charged all applicants for licenses.

Sec. 4.1.030. - Electricians' certificates—Renewal.

(a) The fee for the original certificate for a master electrician, journeyman electrician or residential wireman electrician shall be established by the Director of the MABCD to cover the administrative costs of issuing such certificates. This fee shall be paid to the MABCD when the application for a certificate is made. Individuals not holding a certificate at the beginning of the certificate cycle, who obtain a certificate during such certificate cycle by the standardized test required by K.S.A. 12-1525 and any amendments thereto, will be issued the initial certificate without documentation of continuing education. Such certificate will be issued noting the test provider, specific test type and grade. Such test must be completed during that certificate cycle. All such certificates shall expire on the thirty-first of December of each odd-number year. The biennial fee for all certificates shall be established by the Director of the MABCD to cover the administrative costs of issuing such certificates.

(b) Individuals passing the examination in the first year of a renewal cycle will need to provide documentation of 12 hours of approved continuing education when renewing their certificate. Not less than 6 hours shall consist of electrical code education. The continuing education shall be attended during the certificate cycle. Individuals passing the examination in the second year of a

renewal cycle will need to provide documentation of 6 hours of approved continuing education when renewing their certificate. Not less than 3 hours shall consist of electrical code education. The continuing education shall be attended during the second year of the certificate cycle. Individuals with an active certificate that passed the examination prior to the first year of the renewal cycle must provide written proof of having completed biennially not less than 12 hours of continuing education approved by the MABCD. Not less than 6 hours shall consist of electrical code education. Continuing education shall be provided by the MABCD or a nationally recognized trade association, community college, technical school, technical college or other provider approved by the MABCD. All 12 hours of education shall consist of training relative to electrical construction, maintenance and code up-date training on the electrical code.

(c) Any holder of a certificate who fails to renew the same by March 1st from the date of expiration shall be required to submit one of the following:

- (1) Proof of passing a new examination as required per Section 4.1.020 of this Code; or
- (2) Proof of completing an additional 1½ hours of continuing education for each 3 month period the renewal is late and only when the original certificate was issued pursuant to K.S.A. 12-1525.

Sec. 4.1.040. - Electricians' certificates—Contractor's license—Revocation.

(a) The Board of Electrical Appeals is authorized to cancel, suspend and revoke the certificate of any master electrician, journeyman electrician, certified alarm installer, or residential wireman electrician for any or all of the following reasons:

- (1) Committing of any act in violation of any provisions of this Code, or the refusal or failure to comply with any lawful and reasonable order of the code official or inspector;
- (2) Misrepresentation of a material fact by the applicant in obtaining a certificate;
- (3) Carelessness or negligence in providing reasonable safety measures for the protection of the public.

(b) The Board of Electrical Appeals is authorized to cancel and recall the license of any electrical contractor or alarm contractor for any or all of the following reasons:

- (1) Abandonment of any contract without legal cause;
- (2) Diversion of funds or property received for performance or completion of a specific contract for a specified purpose, in the performance or completion of any contract, and application or use for any other contract, obligation or purpose, or the failure, negligence or refusal to use such funds or property for the performance or completion of said contract;
- (3) Committing of any act in violation of any provisions of this Code, or the refusal or failure to comply with any lawful and reasonable order of the code official or inspector;
- (4) Misrepresentation of a material fact by the applicant in obtaining a license;

- (5) Failure of any contractor to fully certify all claims for labor and material used in the performance of any work for which he has been engaged or for which he has been paid;
 - (6) Use of any license to obtain a permit for another as set forth in Section 1.080 of this Code;
 - (7) Carelessness or negligence in providing reasonable safety measures for the protection of workmen and the public;
 - (8) Failure to obtain permits as required in Section 4.1.110 of this Code;
 - (9) Unreasonable delay in the performance and carrying out of any contract;
 - (10) Failure by the licensee, if a firm, co partnership or corporation, to have at least one active member or officer who has qualified as and has a master's certificate as provided in Section 4.1.060 of this Code.
 - (11) Failure to have the required supervision for apprentice electrician or helper as set forth in Section 4.1.015 of this Code;
 - (12) That the license holder is in arrears on payment of electrical permit and/or re-inspection fees.
 - (13) Misrepresentation of a material fact by a certificate holder on an alarm registration as required by Chapter 3.40 of the Code of the City of Wichita;
 - (14) Allowing a non-certified individual to utilize certification or certification number for the purposes of completing an alarm registration as required by Chapter 3.40 of the Code of the City of Wichita.
- (c) Upon presentation by the code official to the Board of Electrical Appeals of charges against any holder of any certificate, as set forth in this section, the Board of Electrical Appeals shall fix a time and place for a meeting to consider such charges and shall notify the holder of such certificate to be present at such meeting. Such notification shall be in writing and shall be presented to the holder at least five days in advance of the meeting. If upon full hearing of all evidence by the Board of Electrical Appeals it shall be decided that such holder of a certificate has been guilty of any of the actions as hereinbefore set forth in this section, then the board shall have the power to place on probation for a specified time period, temporarily suspend or permanently revoke the license or certificate of the holder thereof.
- (d) When a certificate of a person has been revoked, a new certificate shall not be granted until he shall have corrected the violation in accordance with this Code or any ordinance of the city and shall have made application and have passed an examination as required for the original certificate.

Sec. 4.1.045. - Maintenance of electrical systems.

All electrical systems, both existing and new, shall be maintained in a safe condition. All service equipment, devices and safeguards shall be maintained in working order. When interior wall coverings are removed down to the framing members, such walls shall be brought up to the requirements of the latest edition of the National Electrical Code adopted by the MABCD. Any wiring, equipment, apparatus or devices that are replaced or rewired shall meet the latest edition of the National Electrical Code adopted by the MABCD.

Sec. 4.1.050. - Electrical work performed by owner-occupants of owner-occupied or to be owner-occupied detached single-family dwellings.

Repairs, Replacements, and Maintenance. A person who has received approval of a schematic electrical drawing from the electrical inspector or showing the proper electrical symbols and all the circuitry for the complete project, shall be issued a permit to alter, repair, replace, or maintain any electrical work on the load side of the service panelboard in a single-family dwelling used exclusively for living purposes, including the usual accessory buildings in connection with such buildings in the event that such person is the bona fide owner of such dwelling and accessory buildings, and that the same are occupied by the owner, provided, that said owner shall personally perform all labor in connection therewith. Said person shall call for inspections and otherwise observe all the applicable provisions of this Code.

New Installations in Existing Single-family Residences. The owner-occupant of a detached single-family dwelling may obtain a permit for any electrical installations on the load side of the service panelboard in the main structure and the usual accessory buildings thereto upon fulfillment of exam and plan review requirements as outlined elsewhere in this section. The owner obtaining said permit shall personally purchase all materials and shall personally perform all labor in connection with the permitted project. The owner shall call for all inspections and otherwise observe all the applicable provisions of this Code.

Electrical Installations by Owner-occupants Constructing New Single-family Residences. Persons constructing a new detached single-family residence for their own personal use may be permitted to install all electrical work, on the load side of the service panelboard, in the main structure and the usual accessory structures thereto upon fulfillment of exam and plan review requirements as outlined elsewhere in this section. The owner-occupant shall call for inspections and otherwise observe all of the applicable provisions of this Code; provided, however, that the service entrance raceway, service entrance conductors, meter base, and service panelboard shall be installed by a licensed electrical contractor. The contractor shall call for the service related inspections.

Examinations and Plan Reviews for Installations Required. Owner-occupants applying for permits for installations as outlined above shall first qualify themselves by successfully passing a simplified open book examination dealing with relevant provisions of the Electrical Code. The fee for said examination shall be established by the Director of the MABCD to cover the administrative costs. Successful passage of the examination shall qualify the applicant for future permits until the time of the adoption of another edition of the National Electrical Code by the MABCD.

Prior to permit approval, the applicant shall submit a plan of the installation drawn in a format acceptable in sufficient details to satisfy the code official of the overall code compliance of the anticipated drawing showing the proper electrical symbols and all the circuitry for the complete project. The fee for such plan review shall be established by the Director of the MABCD to cover the administrative costs. Plan submissions requiring extensive review and/or modification may be billed at a rate established by the Director of the MABCD to cover the administrative costs for each additional half hour or portion thereof beyond the original half hour upon prior notification of the applicant of such additional charges.

Permit fees shall be as set forth elsewhere in this Section and in Article 2 of this Code; provided, however, that each additional inspection owing to detected code deficiencies requiring correction shall be billed at a rate established by the Director of the MABCD to cover the administrative costs. Permits for electrical installations shall be limited to one in three years to each applicant unless a waiver is obtained, upon written application, from the board of electrical appeals.

Sec. 4.1.060. - License—Issuance of general electrical.

One electrical license may be issued to any person who is the owner or full time employee of one company only, possessing a valid master electrician's certificate issued by the MABCD, which license shall expire on the thirty-first day of December every two (2) years, beginning in 2013, such that each license shall expire on the thirty-first day of December on each subsequent odd-numbered year. An electrical license may be issued to any firm or corporation of which at least one active member or officer who devotes full time to that firm or corporation and has qualified as and holds a master electrician's certificate; provided a separate license shall be issued for each place of business operated by such firm or corporation.

Sec. 4.1.070. - Electrical license—Elevator restrictions.

An electrical license shall authorize the holder thereof to install feeder conductors to the line side of the elevator controller but shall not authorize the holder thereof to do electrical work on the load side of the controller of such elevator.

Sec. 4.1.080. - License—Misuse.

No license holder shall permit the use of his name by any other person, either directly or indirectly, for the purpose of obtaining a permit or for the purpose of doing any electrical work under his license.

Sec. 4.1.090. - Firm or corporation wiring.

Any person not engaged in the business of electrical installation, within the scope of this Code, who has in his regular and permanent employ a person or persons who possess current and valid master electrician certificates, shall be permitted to have such person or persons install electrical wiring or otherwise perform electrical work in or on buildings or premises that are owned, leased, operated or managed by him. This shall not be construed, however, to allow the installation of electrical wiring in new buildings or to additions to existing buildings. Permits shall be obtained for such work as required in Section 4.1.110 of this Code, and the same shall be issued to the person causing the work to be done.

Sec. 4.1.100. - Re-inspection—Discontinued service.

An electrical inspection shall be required on structures from which the service has been disconnected and structures which have not been in use for six months or more prior to the restoration of service. An application shall be made and the fee set forth in Section 4.1.110 of this Code shall be paid to receive such inspection. If the system is found to be satisfactory, the code official or inspector shall notify the electrical utility that service be restored.

Sec. 4.1.110. - Electrical permit required—Fees listed. See Article 1.2 of this Code

It is unlawful for any person to do or cause to be done any electrical wiring for light, heat or power in or on any building or structure or on any premises in the MABCD jurisdiction without first obtaining a permit from the office of MABCD. Applications for permits shall be made on forms furnished by MABCD, duly executed and signed by a person properly authorized to obtain permits for the applicant. The application may be presented in person, by electronic media or by mail and accompanied by the fee as listed in Article 1.2 of the Code.

Sec. 4.1.120. - Work exempt from permit.

The following work shall be exempt from the requirement for a permit.

- (a) Listed cord and plug connected temporary decorative lighting;
- (b) Repair or replacement of branch circuit overcurrent devices of the required capacity in the same location; and
- (c) Communication wiring except as required by Chapter 3.40 of the Code of the City of Wichita.

Exemption from the permit requirements of this Code shall not be deemed to grant authorization for work to be done in violation of the provisions of this Code or other laws or ordinances of this jurisdiction.

"Temporary" as used in this section is a period of time not to exceed ninety (90) days in a calendar year.

Sec. 4.1.130. - Permits not authority to violate title.

The issuance of granting of a permit shall not be deemed or construed to be a permit for or an approval of any violation of any of the provisions of this Code. No permit presuming to give authority to violate or cancel the provisions of this Code shall be valid, except insofar as the work or use which it authorizes is lawful.

Sec. 4.1.140. - Permits—Expiration—New permit required.

Every permit issued by the building official under the provisions of this Code shall expire by limitation and become null and void if the work authorized by the permit is not commenced within one hundred eighty days from the date of such permit, or if the work authorized by such permit is suspended or abandoned at any time after the work is commenced, for a period of one hundred eighty days, or one hundred eighty days has expired since an inspection, as required in Section 2.020 of this Code, was requested and such inspection was approved by the building authority.

Sec. 4.1.150. - Truth in advertising requirements. See Article 1.4(d) of this Code

Sec. 4.1.160. - Identification of service vehicles. See Article 1.4(b) of this Code

Sec. 4.1.170. – Insurance Requirements. See Article 1.4(c) of this Code.

ARTICLE 4, SECTION 2 - WIRING INSTALLATION REGULATIONS

Sec. 4.2.010. - Installation standards.

All electrical installations made shall be in strict conformity with the provisions of this Code. If sections contained within this Code, in a given situation, do not prescribe a specific type or class of material or specific standards of construction, then the standards as set forth and contained in the National Electrical Code, 2017 Edition including Informative Annex C (Conduit and Tubing Fill Tables), as published by the National Fire Protection Association as N.F.P.A. No. 70-2017, as presently constituted and as may be hereinafter amended, shall apply with the exception of Section 200.6(d); Section 210.5(c)(1); Section 210.52(c)(1) Exception; Section 230.24(A) Exception No. 5; Section 230.40; Section 300.11(b)(2); Section 334.10; Section 334.12(a)(1); Section 334.40(b); Section 590.4(D); Section 590.6(B)(3); and Section 680.9; of such publication. Said N.F.P.A. No. 70-2017, was adopted by the National Fire Protection Association at its 2016 June Technical Session and approved as an American National Standard on August 24, 2016. By this publication, all provisions of such publication, with noted exceptions, are adopted by reference and made a part of this Code, and this Section as though fully set forth herein.

Sec. 4.2.020. - Wiring to be inspected prior to concealing.

Before any electric wiring or raceway is concealed from view during the course of construction, the person doing the work shall notify the electrical inspector that such work is ready for inspection. The electrical inspector shall inspect such work within forty-eight hours, provided such limit of time comes upon a regular working day of the inspector. If any defects exist, the electrical contractor shall be notified and he shall rectify the same and request an inspection before the work is concealed. The code official shall have the authority to require any concealment to be removed. Failure to comply with this order of the code official shall result in condemnation of the structure or any part thereof and prohibition of occupancy.

The electrical inspector shall be notified by the electrical contractor when the electrical work is completed and ready for inspection; and if such work conforms with this Code, the installation shall be released to the utility company for service connection.

When the electrical inspector observes or it is called to his attention that any electrical work is installed contrary to or in violation of any provisions of this code, it shall be his duty to immediately notify the person responsible for the installation that the violation or violations exist. All defective or substandard installations shall be corrected within forty-eight hours from time of notification by the electrical inspector.

It is unlawful for any person or utility company to connect any electrical wiring, device, appliance or equipment, for which a permit or approval is required, to any source of electrical energy without first having approval by the electrical inspector for the connection.

When requested and upon completion of the work, a certificate of inspection shall be issued showing that such work meets the requirements of this Code.

Sec. 4.2.025. - Inspection required.

Any person, firm or corporation who installs any electrical wiring shall request the inspection when the electrical work is completed and ready for inspection. It shall be the duty of the person requesting any inspection required by this Code, to provide access to and means for inspection of such work.

Sec. 4.2.030. - Reinspection of wiring, etc.

The electrical inspector shall make a thorough reinspection of all electrical wiring devices, appliances and equipment whenever deemed advisable within or on any building or premises. When the installation of any electric wiring, device, appliance or equipment is found to be in dangerous and unsafe condition and in noncompliance with this Code, the person owning, using or operating the same shall be notified in writing and shall make the necessary repairs and changes required to place such wiring, device, appliance or equipment in compliance with this Code within the time specified in the notice. Upon failure to comply with the written notice and payment of reinspection fee, the electrical inspector is hereby authorized to notify the utility company supplying electric energy to such building or premises to discontinue electric service and to continue to do so until instructed by the electrical inspector that service may be restored.

Sec. 4.2.035. – Working space about electrical service.

Section 110.26(A)(3) of the National Electrical Code shall be amended to read as follows:

Exception #4: One- and two-family and multifamily dwellings, service panels located in garages, basements or accessory structures, a footing or stem wall that is located below the electric panel shall be permitted to extend not more than 12 inches beyond the front of the electric panel.

Sec. 4.2.040. - Number of service—Entrance conductor sets.

Section 230.40 of the National Electrical Code shall be amended to read as follows:

Number of Service-Entrance Conductor Sets. Each building shall be supplied by only one service drop or lateral. Each service drop or lateral shall supply only one set (or sets where connected in parallel) of service-entrance conductors. All service-entrance conductors shall terminate at the same location.

Exception #1: Where two to six service disconnecting means in separate enclosures are grouped at one location, one set of service-entrance conductors shall be permitted to supply each such service equipment enclosure.

Exception #2: A two family dwelling unit without an approved area separation wall as defined by the currently adopted Building Code, and served from one service drop or lateral, shall be permitted to have one set of service entrance conductors run to each dwelling unit without the mains from both units being located together.

Sec. 4.2.050. - Services—Maximum amps, volts, etc.

A. Service Length. Unfused service entrance conductors shall not be extended more than fifteen feet inside any building.

B. Service Disconnects. Main disconnects shall be installed on the load side of the utility company's meters where not more than six meters and service equipment are grouped together. Where there is an existing main disconnect ahead of six meters or less and all the services are completely revamped, the main disconnects shall be relocated on the load side of the meters.

Sec. 4.2.055. – Feeder or Branch circuit disconnect location.

Article 225.32 of the National Electrical Code (NEC) shall be amended to read:

The disconnecting means shall be installed either inside or outside of the building or structure served or where the conductors pass through the building or structure. The disconnecting means, if installed on the exterior of the building or structure, shall be at a readily accessible location nearest the point of entrance of the conductors. The disconnecting means, if installed inside the building or structure, shall be at a readily accessible location and located so the total length of conductor shall not be extended more than fifteen (15) feet inside of the building or structure. For the purposes of this section, the requirements of 230.6 shall be utilized.

NEC exceptions permitted.

Sec. 4.2.060. - Branch circuit panelboard requirements.

All panels installed shall be sufficiently large enough to provide four blank spaces or four overcurrent protective devices for future use.

Sec. 4.2.070. - Conductor requirements.

A. Commercial and Industrial.

(1) Type. All commercial and industrial wiring conductors rated two hundred (200) amperes or less, including all service conductors required to be installed by the licensed electrical contractor, shall be copper. Each individual conductor of a parallel conductor set shall meet the requirements of this Section. Parallel conductors are not to be considered a single conductor.

Exception. Feeder circuit and branch circuit conductors rated one hundred (100) amperes or more, may be aluminum or copper-clad aluminum, provided panelboards or disconnect switches served by such circuits are marked by the manufacturer as being suitable for aluminum or copper-clad aluminum termination.

(2) Minimum Size. The minimum branch circuit wiring conductor size shall be No. 12 AWG copper.

B. Residential.

All residential and accessory building wiring conductors less than ninety (90) amperes shall be copper.

Note: Grounding conductors installed in the same raceway or cable with the above listed aluminum conductors may be allowed to be aluminum when sized per Article 250 of the currently adopted National Electrical Code.

Sec. 4.2.080. - Concrete-encased electrode.

The grounding electrode conductor to a concrete-encased electrode shall be not less than that required in Table 250.66 of the National Electrical Code.

Sec. 4.2.090. - Color code—Branch circuits.

Where installed in raceways, as cable or as open work, all conductors connected to the same system shall conform to the following color code:

Three-phase, four-wire 120/208 volt - phase A - black, phase B - red, phase C - blue, grounded conductor - white;

Three-phase, four-wire 277/480 volt—phase A - brown, phase B - orange, phase C - yellow, grounded conductor - gray.

The grounded conductor of a three wire 240 volt delta system shall be identified by alternating white and red stripes encircling the conductor.

The grounded conductor of a three wire 480 volt delta system shall be identified by alternating gray and orange stripes encircling the conductor.

Ungrounded circuit conductors used as travelers between 3-way and 4-way switches may be of colors other than those specified.

All conductor sizes 6 AWG or smaller shall be identified by a continuous outer finish along its entire length. Sizes larger than 6AWG shall be identified, at time of installation, by distinctive color markings at its terminations. This marking shall encircle the conductor or insulation.

All circuit conductors of the same color shall be connected to the same ungrounded conductor throughout the premises wiring system(s).

Sec. 4.2.100. - Smoke detector requirements.

Reference shall be made to the appropriate sections of the Title 15 in the jurisdiction of the City of Wichita and Title 12 for the jurisdiction of Sedgwick County.

Sec. 4.2.110. - Splicing of service-entrance conductors.

Service-entrance conductors shall not be spliced.

Exception No. 1: Clamped or bolted connections in metering equipment enclosures shall be permitted.

Exception No. 2: Where service-entrance conductors are tapped to supply two to six disconnecting means grouped at a common location.

Exception No. 3: At a properly enclosed junction point where an underground wiring method is changed to another type of wiring method.

Exception No. 4: A connection shall be permitted where service conductors are extended from a service drop to an outside meter location and returned to connect to the service-entrance conductors of an existing installation.

Exception No. 5: Where service-entrance conductors consist of busway, connections shall be permitted as required to assemble the various sections and fittings.

Sec. 4.2.120. - Switches—Height of.

All switches located outside of a building shall be placed not less than six feet above the finish grade unless they are of the dead front pullout type, or heavy duty type.

Exception. Commercial and industrial installations which are accessible only to authorized personnel.

Sec. 4.2.125. - Type NM, NMC and NMS cable ampacity.

The ampacity of Types NM, NMC, and NMS cable shall be determined in accordance with Table 310.15(B)(16) of the National Electrical Code. The ampacity shall be in accordance with the 60°C (140°F) conductor temperature rating.

Sec. 4.2.130. - NM Cable connectors.

Two piece NM Cable connectors, commonly known as Tomic connectors, shall be permitted to have a maximum of 3 cables in each connector.

Sec. 4.2.135. - Type NM, NMC and NMS cable ran exposed in unfinished basements.

Article 334.15(c) of the National Electrical Code shall be amended to read:

(C) In Unfinished Basements. Where cable is run at angles with joists in unfinished basements, it shall be permissible to secure cables not smaller than two 6 AWG or three 8 AWG conductors directly to the lower edges of the joists. Smaller cables shall be run either through bored holes in joists or on running boards. NM cable installed on the wall of an unfinished basement shall be permitted to be installed in a listed conduit or tubing or shall be protected in accordance with Article 300.4. Conduit or tubing shall be provided with a suitable insulating bushing or adapter at the point the cable enters the raceway. The NM cable

sheath shall extend through the conduit or tubing and into the outlet or device box not less than 6 mm (¼ in.). The cable shall be secured within 300 mm (12 in.) of the point where the cable enters the conduit or tubing. Metal conduit, tubing, and metal outlet boxes shall be connected to the equipment grounding conductor.

Sec. 4.2.140. - Arc-making devices—Clearance from gas meters.

All switches, motors, receptacles, meter, or other arc-making devices shall have a minimum clearance of three feet in any direction from any gas meter when such equipment is installed inside of a building and in the same room as the gas meter.

Sec. 4.2.150. - Ceiling grid support wires.

The following is added to the section 300.11(A)(2) of the National Electrical Code:

Exception No. 2: MC cable or flexible metal conduit may be attached to the ceiling grid support wires serving lighting fixtures located within the ceiling grid area where all the following conditions apply.

1. The MC cable or flexible metal conduit must not be larger than trade size ½ inch.
2. Only a single MC cable or flexible metal conduit may be attached per ceiling grid support wire.
3. Only clips or devices approved for the purpose may be used to attach the MC cable or flex to the support wires.

Fire Rated ceiling assemblies shall not be used to support electrical raceways and all raceways installed within fire rated ceiling assemblies shall be provided with independent support.

Sec. 4.2.160. - Sewage ejector pumps.

All sewage ejector pumps shall be installed on individual motor branch circuits.

Sec. 4.2.165. - Sewage ejector pumps and sump pumps.

Ground fault circuit interrupter protection shall not be required on a sewage ejector pump or sump pump that is cord and plug connected to a single receptacle installed on an individual motor branch circuit.

Sec. 4.2.166. - Residential garage door opener.

In a dwelling, ground fault circuit interrupter protection shall not be required on an overhead garage door opener that is cord and plug connected to a single receptacle installed in the ceiling directly above the overhead garage door opener motor.

Sec. 4.2.180. - Nonmetallic-sheathed cable: Type NM, NMC, and NMS.

Uses permitted: Type NM, Type NMC and Type NMS cable shall be permitted to be used only in one- and two-family dwellings and their accessory structures and multifamily dwelling units. The structure shall not exceed three floors above grade. These structures shall be served only by single-phase services.

Sec. 4.2.186. - Receptacle behind a range or sink.

Section 210.52(c)(1) exception of the National Electrical Code shall be amended to read as follows:

Exception: Receptacle outlets shall not be required on a wall directly behind a range or sink.

Sec. 4.2.193. - Lighting outlets required.

The following requirements for lighting outlets are in addition to the requirements in the latest edition of the National Electrical Code adopted by the MABCD.

A. Residential unfinished basements. Each storage area and all future habitable spaces, as defined by the currently adopted Building Code, that are in the framed-in stage shall have a lighting outlet with a wall-mounted switch for each area or room. Lighting outlets containing a switch shall be controlled by a wall switch.

B. Commercial storage units. Each storage unit shall have a lighting outlet inside the unit with a switch located at the usual point of entry to the storage unit. This luminaire shall be of the type that has a completely enclosed light source.

Exception: Structures that are not on a permanent foundation.

Sec. 4.2.195. - Pools shall not be located under overhead wiring.

Section 680.9 of the National Electrical Code shall be amended to read as follows: The following parts of pools shall not be placed under existing electrical, communication, CATV, Network powered Broadband conductors or any other overhead wiring; nor shall such wiring be installed above the following:

- (1) Pools and the area extending 10 ft horizontally from the inside of the walls of the pool,
- (2) Diving structure, or
- (3) Observation stands, towers or platforms.

Sec. 4.2.200. - Permitted use of multiplex cable.

Multiplex cable may be installed as an approved wiring method for outdoor aerial use only, with the following restrictions.

- (a) Permitted for outside aerial use only.

- (b) Minimum wire size shall be: #1 aluminum or #8 copper.
- (c) In all cases, the phase conductors and the neutral conductor must be insulated and identified.
- (d) The ampacity of the conductors must comply with the values for the respective size and conductor material as listed in the seventy-five degree column of the Ampacity Tables of the latest adopted edition of the National Electrical Code.

Sec. 4.2.205. – Permitted use of Underground Residential Distribution (URD) cable.

Underground Residential Distribution (URD) cable may be installed as an approved wiring method for outdoor use only, with the following restrictions.

- (a) Permitted for outdoor use only, installed direct buried or in a raceway.
- (b) Minimum size shall be #2 Aluminum.
- (c) The phase conductors and the neutral conductor shall be the same size.
- (d) The phase conductors and the neutral conductor insulation shall be identified as USE.
- (e) The Neutral conductor shall be properly identified per the National Electrical Code.
- (f) Grounding conductor, if needed, shall be a minimum of #2 aluminum or #6 copper and shall be insulated.
- (g) The ampacity of the conductors must comply with the values for the respective size and conductor material as listed in the seventy-five degree (75°) column of the Ampacity Tables of the latest adopted edition of the National Electrical Code.

Sec. 4.2.210. - Temporary construction service requirements.

Temporary services used during construction, remodeling or repair of buildings or structures shall not be attached to a building. The temporary service shall have a minimum of one 125-volt 20-amp GFCI protected receptacle and one 125/250-volt 30-amp GFCI protected twist lock receptacle NEMA L14-30, and meet all other requirements of the latest edition of the National Electrical Code adopted by the MABCD.

Exception: In-use covers are not required for temporary services.

Sec. 4.2.230. - Provisions for heating units.

Where a heating unit is installed for the unit or space intended for human occupancy per the requirements set forth in Article 5, the heating unit shall be directly wired into the building wiring with a disconnecting means installed in a readily accessible location within sight from the heating unit.

Sec. 4.2.240. – Listing of Signs. 2014 NEC Article 600.3.

Effective August 1, 2017. All new, relocated, fixed, mobile, or portable electric signs, section signs, outline lighting, and retrofit kits, regardless of voltage, shall be installed using either the “Listed Method” or “Approved Method”, and shall be provided with installation instructions, and installed in conformance with the “Listed Method”, or the “Approved Method” as set forth by MABCD.

A. Listed Method shall comply with the following:

Signs built for installation in Sedgwick County shall be assembled by sign companies registered by a nationally recognized listing agency. This information will be kept on file at the MABCD office.

B. Approved Method shall comply with the following:

Signs shall be constructed using listed components.

The following information shall be submitted to the MABCD for review and approval.

1. A compiled list (bill of materials) of listed components.
2. Wiring schematic or photo.
3. Electrical service requirements.
4. Primary Voltage
5. Amperage.

C. Existing Sign relocation shall comply with the following:

Be provided with address of current location.

1. Address of proposed location.
2. Photograph of sign.
3. Electrical service requirements.
4. Primary Voltage.
5. Amperage.

D. Additional Requirements shall comply with the following:

Final connection to the building’s wiring system shall be performed by a licensed electrical contractor.

Sign companies may hire a master electrician as their qualified individual and obtain an electrical contractor license to do business as an electrical contractor.

An electrical contractor may be hired by the owner or the sign company, to make final connection to the building’s wiring system.

When an electrical contractor is already working on the project, final connection of the sign can be done as part of the existing electrical permit.

E. Electrical Permits required for sign installation, and shall comply with the following:

A separate permit is required for final connection of all signs provided with electrical power.

An electrical permit is required to be attached to the sign permit prior to the electrical connection of the sign.

The sign permit will remain in conditional status until the electrical permit is attached.

Once the electrical permit is attached, the sign permit shall be fully permitted

- F. Field-Installed Skeleton Tubing. Field-installed skeleton tubing shall not be required to be listed where installed in conformance with this Code.
- G. Outline Lighting. Outline lighting shall not be required to be listed as a system when it consists of listed luminaires wired in accordance with this Code and Chapter 3 of the 2014 National Electrical Code.
- H. MABCD staff will review requests for records generated pursuant to this section to determine whether such records are required to be open pursuant to the Kansas Open Records Act (K.S.A. 45-215 *et seq.*).

Article 4, Section 3 - MOBILE HOMES

Sec. 4.3.010. - Manufactured home installer's license—Required.

It is unlawful for any person to engage in the business, trade or otherwise perform the act of installing electric wiring or of the installation of electrical equipment, devices or apparatus for light, heat, or power purposes in or on any mobile or manufactured home without having secured a manufactured home installer's license from the State of Kansas pursuant to the Manufactured Housing Act, K.S.A. 58-4202, *et seq.* and amendments thereto.

Exception. Any person possessing a valid electrical contractor's license as provided for under the provisions of this Code shall be permitted to perform any act set forth in this section.

Sec. 4.3.020. - Permits and fees. See also Article 1.2 of this Code.

A permit shall be obtained to install any wiring in, on or to any mobile or manufactured home or accessory structure and the permit fee computed as detailed in Section 4.1.110 of this Code.

Article 4, Section 4 - PREFABRICATED ASSEMBLIES

Sec. 4.4.010. - Definitions.

The following definitions shall apply in the interpretation of this chapter:

- (1) "Prefabricated assembly" means a structural unit, the integral parts of which have been built up or assembled prior to incorporation in the building or to being erected as a building unit.
- (2) "Approved agency" means an established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the building official (Director of the MABCD).

Sec. 4.4.020. - Certificates of approval.

A certificate of approval by an approved agency shall be furnished with every prefabricated assembly, except where the assembly is readily accessible to inspection at the site. The certificate of approval shall certify that the assembly in question has been inspected and meets all the requirements of Article 4 of this Code.

Sec. 4.4.030. - Field erection.

Placement of prefabricated assemblies at the building site shall be inspected by the electrical inspector to determine compliance herewith.

Sec. 4.4.040. - Master electrician's certificate or approved agency certification.

The installation of electrical wiring for equipment, apparatus or devices for light, heat or power purposes within or on any prefabricated assembly to be erected shall be performed under the supervision of a person who has secured a master electrician's certificate as set forth in Sections 4.1.020 and 4.1.030 of this Code, or shall have been factory installed and inspected by an agency approved by the building official as provided in Section 4.1.010 of this Code.

Sec. 4.4.050. - Permits and fees. See also Article 1.2 of this Code.

A permit shall be obtained to install any prefabricated assembly and the permit fee computed as detailed in Section 4.1.110 of this Code.

Article 4, Section 5 - ELEVATORS AND ESCALATORS

Sec. 4.5.010. - Purpose.

The purpose of this chapter is to safeguard life, limb, property, and public welfare by establishing minimum requirements regulating the design, construction, alteration, operation, and maintenance of elevators, dumbwaiters, escalators, and moving walks, and by establishing procedures by which these requirements may be enforced. The purpose of this code is not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this Code.

Sec. 4.5.020. - Installation standards.

(A) All new or modernized elevators, dumbwaiters, escalators, moving walks, material lifts and related hoistways installations made shall be in strict conformity with the provisions of this Code and with the approved standards of construction, for safety to life and property. If sections contained within this Code, in a given situation, do not prescribe a specific type or class of material or specific standards of construction, then the standards as set forth and contained in the ASME A17.1-2016 Safety Code for Elevators and Escalators with all the addendums thereto, published by the American Society of Mechanical Engineers, shall apply to the design, construction, installation, operation, alteration and repair of elevators, handicapped accessibility lifts, dumbwaiters, escalators and moving walks and their hoistways with the exception of Section 8.11.5.2. All elevators, escalators, and related equipment, shall be subject to the applicable acceptance and periodic inspections and tests as specified in the currently adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators. The periodic inspections and periodic tests of category 1 shall be made at intervals not longer than one (1) year. The periodic tests of category 3 and 5 shall be made at intervals not longer than five (5) years. By this publication, all provisions of such publication are adopted by reference and made a part of this Code and this Section as though fully set forth herein.

(B) All existing elevators, dumbwaiters, escalators, moving walks, material lifts and related hoistways installations, shall be in strict conformity with the provisions of this Code and with the approved standards of construction, for safety to life and property. If sections contained within this Code, in a given situation, do not prescribe a specific type or class of material or specific standards of construction, then the standards as set forth and contained in the ASME A17.3-2015 Safety Code for Existing Elevators and Escalators with all the addendums thereto, published by the American Society of Mechanical Engineers, shall apply except Sections 2.1.2, 2.1.3, 2.3.1, 2.3.3, 2.7.3, 2.7.4, 3.3.5, 3.4.4.1, 3.5.1, 3.5.5, 3.9.2, 3.10.1, 3.10.2 & 4.5.2 which shall have an effective date of January 1, 2019; Sections 2.1.4, 2.2.4, 2.8.2, 3.6.1 & 3.10.4 shall have an effective date of January 1, 2020; Sections 3.6.2, 3.10.3 & 4.7.2 shall have an effective date of January 1, 2021; Sections 2.2.2 & 2.6.1 shall have an effective date of January 1, 2022; Sections 3.4.2, 3.11.3 & 4.3.3 shall have an effective date of January 1, 2023. The periodic inspections and periodic tests of category 1 shall be made at intervals not longer than one (1) year. The periodic tests of category 3 and 5 shall be made at intervals not longer than five (5) years. By this publication, all provisions of such publication are adopted by reference and made a part of this Code and this Section as though fully set forth herein.

(C) All handicapped accessibility lifts, inclined stairway chairlifts, inclined and vertical platform lifts, and private residence inclined stairway chairlifts and private residence inclined and vertical platform lifts shall have prior approval and be in strict conformity with the provisions of this Code and with the approved standards of construction, for safety to life and property. If sections contained within this Code, in a given situation, do not prescribe a specific type or class of material or specific standards of construction, then the standards as set forth and contained in the ASME A18.1-2017 Safety Standard for Platform Lifts and Stairway Chairlifts with all addendums thereto, published by the American Society of Mechanical Engineers, shall apply to the design, construction, installation, operation, alteration and repair of handicapped accessibility lifts. All handicapped accessibility lifts, inclined stairway chairlifts, inclined and vertical platform lifts, and private residence inclined stairway chairlifts and private residence inclined and vertical platform lifts and related equipment, shall be subject to the applicable acceptance tests as specified in the currently adopted edition of the ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts. All handicapped accessibility lifts, inclined stairway chairlifts, inclined and vertical platform lifts, except in a private residence, shall be subject to periodic inspections and one (1) year periodic tests as specified in the currently adopted edition of the ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts. The periodic inspections shall be made at intervals not longer than one (1) year. By this publication, all provisions of such publication are adopted by reference and made a part of this Code and this Section as though fully set forth herein.

Sec. 4.5.030. - Definitions.

"Elevator" as used in this Code, is inclusive of elevators, escalators, dumbwaiters, moving walks and material lifts.

"Elevator contractor" is a person, firm or corporation licensed to bid, plan, layout, install and supervise the installation, repair or maintenance of elevators and their associated equipment, material or devices.

"Handicapped accessibility lift" means a hoisting and lowering mechanism equipped with a car, platform or chair that is installed in locations for use by the physically handicapped. For purposes of this Code, this definition specifically refers to the following devices: inclined stairway chairlifts, inclined and vertical platform lifts, and private residence inclined stairway chairlifts and private residence inclined and vertical platform lifts.

"Handicapped accessibility lift contractor" is a person, firm or corporation licensed to bid, plan, layout, install and supervise the installation, repair or maintenance of handicapped accessibility lifts and their associated equipment, material or devices.

"Modernization," as used in this Code, means updating all aspects of the car, platform, hoistway, machine room and all related equipment. The requirements set forth in the currently adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators, published by the American Society of Mechanical Engineers shall apply."

Sec. 4.5.050. - Elevator inspectors—Authority to issue written notices.

The elevator inspector shall issue a written notice for any failure to correct a violation of this code. Should any person, firm or corporation served by such notice fail or refuse to comply with the orders contained in the notice within the time specified therein, the elevator inspector shall have the authority to remove from service any elevator, escalator or related equipment and/or such person, firm or corporation shall be subject to the penalties provided for in Article 1.2 of this Code.

Sec. 4.5.060. - Elevator inspectors—Right of entry.

In order to carry out the provisions of this Code, the elevator inspectors shall have the authority during reasonable hours to enter any building or upon any premises in the discharge of their duties for the purpose of making inspections and tests of an installation of elevators, handicapped accessibility lifts, dumbwaiters, escalators, moving walks and related hoistways.

Sec. 4.5.070. - Elevator inspectors—Authority to remove from service.

The elevator inspector shall have the authority to remove from service or cause to be removed from service, any elevator or escalator when the periodic test or periodic inspection is past the required interval as set forth by MABCD per ASME A17.1 Section 8.11.1.3, or when necessary for the protection of life or property, and shall order the equipment out of service until the same is made safe and conforms to the standards set forth in this Code and verified by the inspector. Removal of a red tag is a violation and subject to penalties listed in Article 1 Section 3 of this Code

Sec. 4.5.080. - Liability of persons owning or installing elevators or escalators.

This Section shall not be construed to relieve from liability or to lessen the responsibility of any person owning, controlling or installing any elevators, handicapped accessibility lifts, dumbwaiters, escalators and moving walks. Neither the City of Wichita nor Sedgwick County shall not be held as assuming any liability of any nature by reason of the inspection authorized in this Code or certificate issued, and no officer or employee charged with the enforcement of this Code shall be held personally liable for any damage that may accrue to persons or property as a result of any act required or committed in the discharge of his duties.

Sec. 4.5.085. - Penalties for violations. See Article 1.2 of this Code.

Sec. 4.5.090. - Elevator or handicapped accessibility lifts license—Required.

It is unlawful for any person to engage in the business of the installation or repair of elevators, handicapped accessibility lifts, dumbwaiters, escalators or moving walks in or on any building or premises without having secured an elevator license from the Director of the MABCD.

Sec. 4.5.095. - Master and journeyman electrical elevator certificates—Required.

It is unlawful for any person to engage in the business of elevator or handicapped accessibility lifts contracting without first having secured a master elevator certificate as provided for in this Code. The master shall be responsible for all work encompassed in the inspection requested by and/or on the permit issued.

It is further unlawful for any person to engage in the trade or otherwise perform the act of installing or repairing elevator, handicapped accessibility lifts, dumbwaiters, escalators or moving walks within or on any building or premises without first having secured a master or journeyman elevator's certificate as herein provided for and be in the employ of a licensed elevator or handicapped accessibility lifts contractor.

Sec. 4.5.096. - Apprentice elevator mechanic and/or helper.

(a) Apprentice elevator mechanic or helper shall be permitted to perform the act of installing or repairing elevators, handicapped accessibility lifts, dumbwaiters, escalators or moving walks when he or she is on the job site with and under the supervision of a master or journeyman elevator mechanic certified by this Code and both be in the employ of a licensed electrical contractor. If an apprentice or helper works without the required supervision, both the elevator contractor license holder and the apprentice/helper shall be guilty of this offense.

(1) "*Job site*" is defined as the property that an individual permit is issued for.

(b) A numeric ratio of apprentices or helpers to certified master or journeyman elevator mechanics on any job site shall not be greater than four (4) apprentices and/or helpers for each certified elevator mechanic.

Sec. 4.5.100. - Elevators' certificates—Application—Examination—Renewal.

Applications for examination for a master elevators certificate shall be made to the MABCD. Applicants for the elevators examination shall provide written documented proof of at least four (4) years practical experience as a mechanic or mechanic apprentice in the elevator or handicapped accessibility lift construction industry or attending an accredited elevator trade school. No more than one (1) year of the requirement may be satisfied by trade related schooling consisting of minimum of nine hundred thirty (930) hours classroom training.

Documentation shall be the following:

- (1) written letter on company letterhead from employer(s) stating job description and dates of employment;
- (2) copy of a transcript or attendance record from an accredited elevator trade school;
- (3) a written letter on a city letterhead from the building official or elevator inspection division of a city where the applicant is licensed as an elevator or handicapped accessibility lift contractor, or is certified by that city as an electrical elevator master and stating the length of time of the certification or license.

The fee for an examination and original certificate for an elevator master shall be established by the Director of the MABCD to cover the administrative costs of issuing such certificates. This fee shall be paid to the MABCD when the application for an examination is made. Such certificate shall expire on December 31st of each odd-numbered year.

The biennial fee for renewal of this certificate shall be established by the Director of the MABCD to cover the administrative costs of issuing such certificates. Any holder of a certificate who fails to renew the same by March 1st from the date of expiration shall be required to take a new examination before receiving a new certificate.

A ninety (90) day temporary journeyman elevator certificate may be issued to an applicant providing documented proof of at least four (4) years practical experience in the elevator or handicapped accessibility lift construction industry.

Documentation shall be one of the following:

- (1) written letter on company letterhead from employer(s) stating job description and dates of employment;

(2) written letter on a city letterhead from the building official or elevator inspection division of a city where the applicant is licensed as an elevator or handicapped accessibility lift contractor, or is certified by that city as an electrical elevator master and stating the length of time of the certification or license.

The fee for this certificate shall be established by the Director of the MABCD to cover the administrative costs of issuing such certificates. Such certificates shall be limited to one (1) in twenty-four (24) months to each applicant.

Sec. 4.5.105. - Elevator certificates—Reciprocity.

Any person with written proof of successful completion of the required elevator master test promulgated or administered, or both, by Prometric, a current subsidiary of Educational Testing Services, with a minimum passing score of seventy-five (75) percent, or any person with written proof of successful completion of the QEI-1 test with a minimum passing score of seventy-five (75) percent and the QEI certification is still active, or written proof of successful completion of any national elevator code test with a minimum passing score of seventy-five (75) percent, designed and promulgated by a nationally recognized testing agency shall be issued the appropriate certificate. The MABCD shall establish a uniform fee to be charged for certificates.

Sec. 4.5.110. - License—Issuance of elevator.

Any person, firm, entity or corporation shall be issued an elevator license, provided such person or one active officer of the firm, entity or corporation who devotes full time to that firm, entity or corporation shall have submitted evidence and has qualified as to experience and ability in matters pertaining to the installation and maintenance of elevators. Such experience and ability must be confirmed by successful passage of an examination as required in Section 4.5.100 of this Code. The license shall expire on December 31st of each odd-numbered year.

Sec. 4.5.120. - Elevator license—Restrictions.

Elevator licenses shall permit the holders thereof to install only electrical work on the elevator side of the feed wire connection to the controller, including the control board, elevator motors, signals and lights, and to do all other wiring required for the control and operation of the elevators. All electrical work performed under licenses issued in conformance with this section must be in conformance with the provisions of this Code.

Sec. 4.5.130. - Electrical elevator certificates—Elevator contractor's license—Revocation.

Electrical elevator certificates and elevator contractor's license requirements and revocation procedures shall be the same as provided for under Section 4.1.040.

Sec. 4.5.140. - License—Issuance of handicapped accessibility lifts contractor.

Any person, firm, entity or corporation shall be issued a handicapped accessibility lifts license, provided such person or one active member or officer of the firm or corporation who devotes full time to that firm, entity or corporation shall have submitted evidence of qualifications and experience and has been examined as required in Section 4.5.100 of this Code in handicapped accessibility lifts. The license shall expire on December 31st of each odd-numbered year.

Sec. 4.5.150. - Handicapped accessibility lifts license—Restrictions.

Handicapped accessibility lifts licenses shall permit the holders thereof to install only electrical work on the load side of the disconnect or controller of the handicapped accessibility lift, including motors, signals and lights and to do all other wiring required for the control and operation of the handicapped accessibility lift. All electrical work performed under licenses issued in conformance with this section must be in conformance with this Code.

Sec. 4.5.160. - Handicapped accessibility lifts contractor's license—Revocation.

Handicapped accessibility lifts contractor's license requirements and revocation procedures shall be the same as provided for under Section 4.1.040 of this Code.

Sec. 4.5.170. - License—Misuse.

No license holder shall permit the use of his name by any other person or entity, either directly or indirectly, for the purpose of obtaining a permit or for the purpose of doing any elevator, handicapped accessibility lift, dumbwaiter, escalator or moving walk work under his license.

Sec. 4.5.180. - Owners requesting elevator removed from service.

Owners requesting an elevator removed permanently from service shall have the elevator contractor perform the following:

- (A) Hydraulic Elevator: Open the manual lowering valve and land the elevator car on the springs. Remove the hydraulic fluid.
- (B) Traction Elevator: Lower the elevator car and land on the springs. Remove the hoist cables.
- (C) All elevators shall have the load side conductors to the disconnecting means removed and a lock shall be installed.

Owners requesting an elevator removed temporarily from service shall allow the elevator inspector to perform the following:

- (A) Remove the source of power to the elevator by turning off the electrical disconnect, installing a lock, and a red tag on the disconnect as applicable.

A re-inspection fee shall apply when an elevator is to be returned to service.

Sec. 4.5.190. - Alterations and repairs.

The following alterations and/or repairs require permits from the MABCD:

- (1) Increase in rated load or speed;
- (2) Increase or decrease in dead weight of car;
- (3) Increase or decrease in travel;
- (4) Change in type of operation or control;
- (5) Replacement, change in size, length or number of suspension ropes, belts or chains;
- (6) Replacement, change in size or length of safety or governor ropes;
- (7) Replacement, change in size or type of guide rails;
- (8) Replacement, change in type or addition of a car or counterweight safety;
- (9) Change in power supply;
- (10) Replacement of an existing machine by a new driving machine;
- (11) Replacement of an existing governor by a new governor;
- (12) Replacement of an existing controller by a new controller;
- (13) Replacement of an existing driving machine brake by a new brake or braking components;
- (14) Replacement of tanks or anti-creep leveling device;
- (15) Replacement of pump unit, motor or valves;
- (16) Replacement of hoistway doors;
- (17) Replacement of hoistway door re-opening devices;
- (18) Addition or Alteration of hoistway-door locking devices or car-door or gate electric contacts;
- (19) Addition or Alteration of hoistway access switches;
- (20) Addition or Alteration of top-of-car operating devices;
- (21) Addition or Alteration of top-of-car, hoistway-door and/or car-door or gate operating devices;
- (22) Addition or Alteration of rope equalizers;
- (23) Addition or Alteration of auxiliary rope-fastening devices;
- (24) Addition or Alteration of car-leveling or truck-zoning devices;
- (25) Addition or Alteration of roller guide shoe assemblies;
- (26) Addition or Alteration of automatic transfer device;
- (27) Addition, Replacement or Alteration of fire service;
- (28) Addition, Replacement or Alteration of ADA compliant devices;

- (29) Replacement of hydraulic cylinder or plunger;
- (30) Replacement, addition or removal of canopy, wall or floor covering;
- (31) Replacement of car operation panel;
- (32) Prior to placing an elevator back in service after it has been red tagged;
- (33) Replacement of escalator step(s);
- (34) Replacement of escalator handrails;
- (35) Replacement or alteration of any safety operation switch or device;
- (36) Addition, Replacement or Alteration of elevator operation security devices.

Sec. 4.5.195. - Elevator inspected prior to use.

All new and red tagged elevators shall be inspected and approved prior to use by the public. The elevator contractor shall notify the elevator inspector two business days before the elevator is ready for inspection.

When the elevator inspector observes or it is called to his attention that any elevator work is installed contrary to or in violation of any provisions of this Code, it shall be his duty to immediately notify the person responsible for the installation that the violation or violations exist. All defective or substandard installations shall be corrected within a reasonable time frame as set forth by the MABCD.

Sec. 4.5.200. - Permit required—Fees listed.

It is unlawful for any person, firm, entity or corporation to do or cause to be done the installation, alteration, maintenance or repair of elevators, handicapped accessibility lifts, dumbwaiters, escalators or moving walks in or on any building or premises in the MABCD jurisdiction without first having obtained a permit from the office of MABCD. Applications for permits shall be made on forms furnished by MABCD, duly executed and signed by a person properly authorized to obtain permits for the applicant. The application may be presented in person, by electronic media or by mail and accompanied by the fee as listed in Article 1.2 of this Code.

Sec. 4.5.210. - Test tags.

Elevators and escalators shall have a metal tag with the test date and the name of the person or firm performing the test installed in the machine room for all one year and five year periodic tests.

Handicap accessibility lifts, inclined stairway chairlifts and inclined and vertical platform lifts shall have a metal tag with the test date and the name of the person or firm performing the test attached to the governor, machine or equipment in a permanent manner for all one year and five year periodic tests.

Sec. 4.5.220. - Replacement of controller.

Replacement of the controller that changes the type of operation or control of the elevator shall require modernization of the elevator.

Sec. 4.5.250. - Sump pump discharge.

Sump pumps in the pit of an elevator or escalator shall discharge to the outside of the building or into a clear or transparent plastic fifty-five (55) gallon storage container that is located in the machine room or adjacent room. This storage unit shall have a label that reads "Hydraulic Fluid or Grease with Water" with a minimum of two (2) inch letters.

Sec. 4.5.255. – Pit hydraulic oil overflow containers.

All elevator cylinder hydraulic oil overflow containers shall be clear or transparent, shall be a maximum five (5) gallon container, and shall be installed for each separate cylinder.

Sec. 4.5.260. - Inspection compliance certificates.

The elevator inspector, as provided for in Section 4.5.040, shall perform acceptance and periodic inspections and tests as required by this Code and when found in compliance with this Section will, after all fees are paid in accordance with Section 4.5.200, issue a compliance certificate for all commercial applications. This certificate shall be permanently displayed in the elevator car for which the certificate was issued. The certificate shall be framed and installed not less than five feet nor more than five feet six inches from the platform of the car to the bottom of the frame or a location approved by the elevator inspector. Escalators and handicap accessibility lifts shall have the compliance certificate permanently displayed in a frame adjacent to the equipment and at a location approved by the elevator inspector. The frame shall be a minimum of six (6) inches by nine (9) inches.

Article 4, Section 6 - ELEVATORS IN COMMERCIAL BUILDINGS FOR PERSONS WITH DISABILITY

Sec. 4.6.010. - Scope.

This Section applies to private residence type elevators, platform lifts, and stairway chairlifts, installed in commercial buildings and used only by persons with a disability and so installed that they are not accessible to the general public or to occupants of the building.

Sec. 4.6.020. - Installation standards.

All installations of private residence elevators, platform lifts, and stairway chairlifts, in commercial structures for use by persons with a disability shall be in strict conformity with the provisions of this Code and with the approved standards of construction for safety to life and property. If sections contained within this Code, in a given situation, do not prescribe a specific type or class of material or specific standards of construction, then the applicable standards as set forth for elevators and contained in the currently adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators, or ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts, published by the American Society of Mechanical Engineers shall apply to the design, construction, installation, operation, alteration and repair of this type of elevator or lift.

All installations of private residence type elevators, platform lifts and stairway chairlifts in commercial buildings shall have prior approval and be in strict conformity with the provisions of this Code and with approved standards of construction for safety to life and property. If sections contained within this Code do not prescribe a specific type or class of material or specific standards of construction, then the applicable standards as set forth in the currently adopted edition of the ASME A18.1 Safety Standard for Platform Lifts and Stairway Chairlifts or ASME A17.1 Safety Code for Elevators and Escalators, with all addendums thereto, published by the American Society of Mechanical Engineers, shall apply to the design, construction, installation, operation, alteration and repair of this type of elevator or lift.

Sec. 4.6.025. - Equipment in hoistways and machine rooms.

All equipment installed in hoistways and machine rooms shall conform to Section 2.8 of the currently adopted edition of the-ASME A17.1 Safety Code for Elevators and Escalators.

Sec. 4.6.030. - Construction of hoistways.

- (A) Hoistways shall be enclosed throughout their height with fire-resistive enclosures as required by Article 2 of this Code.
- (B) All elevator hoistway-landing openings shall be provided with entrances which shall guard the full height and width of the openings.
- (C) Hoistways of elevators shall be provided with means to prevent the accumulation of smoke and hot gases in case of fire as required by Article 2 of this Code.

Sec. 4.6.035. - Machine rooms and machinery spaces.

Machine rooms and machinery spaces shall conform to Section 2.7 of the currently adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators.

Sec. 4.6.040. - Buffers.

Buffers shall be installed under cars and counterweights. The buffers shall conform to the applicable section and standards of the currently adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators.

Sec. 4.6.050. - Pits.

(A) A pit shall be provided for every elevator. The depth of the pit shall be not less than is required for the installation of the buffers. The pit shall be kept clean and free from dirt and rubbish. The pit shall not be used for storage purposes and shall be maintained free of an accumulation of water.

(B) Drains connected directly to sewers shall not be installed in elevator pits. Sumps may be installed.

(C) Sumps in pits, where provided, shall be covered. The cover shall be level with the pit floor.

Sec. 4.6.060. - Car enclosures.

(A) Illumination of cars and lighting fixtures shall be installed and conform with Section 2.14.7 of the currently adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators.

(B) The minimum car enclosure measurements shall be forty-eight (48) inches deep and thirty-six (36) inches wide with a front opening door or a front and rear opening door.

(C) Emergency Stop Switch shall be installed and have an audible signal installed conforming with Section 2.27.1.2 and Section 2.27.1.1.5 of the currently adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators.

Sec. 4.6.080. - Authorized personnel.

(A) Only authorized personnel, designated by the owner or tenant of the building, shall have access to the keys. The keys shall be kept on the premises in a readily accessible location available to the authorized personnel, but not where they are available to the general public.

(B) The authorized personnel having access to the key shall be summoned by means of a clearly labeled attendant call device located at each landing.

Sec. 4.6.100. - Signage posted.

A distinct visible sign stating "This Elevator For Use By The Disabled Only" must be installed adjacent to the entrance to the elevator car on each landing. The letters shall not be less than one-fourth inch.

Sec. 4.6.110. - Required inspections.

All elevators shall be subject to the applicable acceptance, routine, and periodic inspections and tests as specified in the currently adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators. The routine inspections and tests shall be made at intervals not longer than one (1) year. The periodic inspections and periodic tests of category 1 shall be made at intervals not longer than one (1) year. The periodic tests of category 3 and 5 shall be made at intervals not longer than five (5) years.

Sec. 4.6.120. - Permits and fees. See Article 1.2 of this Code.

Article 4, Section 7 - FREIGHT TYPE ELEVATORS IN COMMERCIAL BUILDINGS

Sec. 4.7.010. - Scope.

This Section applies to existing freight type elevators in commercial buildings and allows this type of elevator to be altered and converted to permit the carrying of passengers.

Sec. 4.7.020. - Installation standards.

All alterations and conversions of existing freight type elevators to permit carrying of passengers shall be in strict conformity with the provisions of this Code and with the approved standards of construction for safety to life and property. If sections contained within this Code, in a given situation, do not prescribe a specific type or class of material or specific standards of construction, then the standards as set forth and contained in the latest adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators, published by the American Society of Mechanical Engineers, shall apply to the design, construction, installation, operation, alteration and repair of this type of elevator.

Sec. 4.7.030. - Driving machines.

All driving machines shall be of the traction type or of the hydraulic type.

Sec. 4.7.040. - Minimum rated load.

The rated load in pounds for passenger elevators shall be based on the inside net platform area, and shall be not less than shown in Table 2.16.1.1 of the latest adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators.

Sec. 4.7.050. - Types of entrances.

For passenger elevators and freight elevators authorized to carry passengers, entrances shall be one of the following types:

- (1) At landing openings used by passengers or for freight:
 - (a) Horizontal slide;
 - (b) Swing, single-section;
 - (c) Combination horizontal slide and swing;
 - (d) Power-operated, vertical slide biparting counter-balanced, or vertical slide counter weighted which slide down to open, where located at entrances used by passengers.

Sec. 4.7.060. - Openings prohibited.

Openings or hinged or removable panels in an enclosure are prohibited, other than as required for the following:

- (1) Signal, operating, and communication equipment;
- (2) Entrances;
- (3) Vision panels;
- (4) Emergency exits;
- (5) Ventilation; and
- (6) Access panels for maintenance of equipment when approved by the authority having jurisdiction. Such panels, where provided, shall conform to the applicable rules as set forth and contained in the latest adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators, except that they are not required to be openable from the outside.

Sec. 4.7.070. - Requirements for passenger overload.

Passenger elevators and freight elevators converted to permit the carrying of passengers shall be designed and installed to safely lower, stop, and hold the car with an additional load of twenty-five percent in excess of the elevators' rated load.

Sec. 4.7.080. - Car enclosures.

(A) Illumination of cars and lighting fixtures shall be installed and conform to the applicable rules as set forth and contained in the latest adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators.

Sec. 4.7.100. - Required inspections.

All elevators shall be subject to the applicable acceptance, routine, and periodic inspections and tests as specified and set forth and contained in the latest adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators. The routine inspections and tests shall be made at intervals not longer than one (1) year. The periodic inspections and periodic tests of category 1 shall be made at intervals not longer than one (1) year. The periodic tests of category 3 and 5 shall be made at intervals not longer than five (5) years.

Sec. 4.7.110. - Emergency operation and signaling devices.

All elevators shall comply with and conform to the emergency operation and signaling devices requirements set forth and contained in the latest adopted edition of the ASME A17.1 Safety Code for Elevators and Escalators.

Sec. 4.7.120. - Permits and fees. See Article 1.2 of this Code.

ARTICLE 5 – INTERNATIONAL MECHANICAL CODE

Sec. 5.A.010. - Board of appeals—Created; composition.

There shall be and is authorized a board of appeals of air conditioning, refrigeration and warm air heating, which shall consist of the Director of the Metropolitan Area Building and Construction Department ("MABCD") or his duly authorized representative, who shall serve as secretary of the board, and seven other members, as follows:

- (1) A refrigeration contractor (appointed by the City);
- (2) A journeyman heating and air conditioning mechanic (appointed by the County);
- (3) A boiler contractor (appointed by the City);
- (4) A master air conditioning and warm air heating contractor (appointed by the County);
- (5) A journeyman boiler (appointed by the City);
- (6) A public at large (appointed jointly);
- (7) A mechanical engineer (appointed by the County).

Sec. 5.A.020. - Board of appeals—Qualifications and appointment of members.

The contractor and Journeyman members of the Board shall, in the first instance, are those who have been established in their respective business so as to be qualified to obtain their certificates and licenses as provided in Sections 5.1.270 and 5.1.330 of this Code. The mechanical engineer and architect members shall be licensed by the state to engage in business in their respective fields.

Sec. 5.A.030. - Board of appeals— Acting as arbitration board.

The Board shall act as an arbitration board in deciding any question which may arise between an air conditioning, refrigeration, warm air heating and boiler contractors or Journeyman and the inspector.

When conditions exist which are not covered by this Code, or where it would be impracticable to follow this Code, the Board may grant a variance from the strict application of this Code. Those individuals asking for any such concession must make their request in writing, and give a complete description of all items involved. If the request is granted, a copy of the whole transaction must be placed on file in the Office of the MABCD.

The Board shall pass upon materials or methods of installation not sufficiently provided for in this Code, and accept or reject the same as complying with the intent of the Code.

The Board is expressly given the responsibility of studying and making such rules as are required for new products being offered for use in air conditioning, refrigeration, warm air heating and boiler systems. All such rules shall be in writing and filed in the Office of the MABCD.

Sec. 5.A.040. - Mechanical inspectors – Appointment - Duties

Within the jurisdiction of the MABCD, all commercial mechanical inspectors shall have had a

minimum of five (5) years of practical experience in this field as a Journeyman or Master and hold a current mechanical certificate and shall be duly appointed pursuant to the requirements set forth by the Director of the MABCD. Upon satisfaction of the minimum qualifications for a commercial mechanical inspector, the Director of the MABCD shall have the discretion to appoint the employee as a combination inspector.

Article 5, Section 1 – INTERNATIONAL MECHANICAL CODE

Sec. 5.1.010. - Adoption of the International Mechanical Code.

The International Mechanical Code, as published by the International Code Council, Inc. 2012 Edition, excluding appendix B, and sections 301.2, 301.3, 501.3.1.1, 802.8, and 1101.10 is hereby adopted and incorporated herein by reference, subject to such amendments thereto as are set forth hereinafter. Section 101.1 of the International Mechanical Code, as adopted by reference herein, shall be amended to read as follows: Title. These regulations shall be known as the Wichita – Sedgwick County Unified Building and Trade Code, Article 5 International Mechanical Code, hereinafter referred to as “this Code”.

Sec. 5.1.020. - Scope.

Section 101.2 of the International Mechanical Code, as adopted by reference herein, shall be amended to read as follows: This Code shall regulate the design, installation, maintenance, alteration and inspection of mechanical systems that are permanently installed and utilized to provide control of environmental conditions and related processes within buildings. This Code shall also regulate those mechanical systems, system components, equipment and appliances specifically addressed herein. The installation of fuel gas equipment, fuel gas fired appliances and gas-fired appliance venting systems shall be regulated by the International Fuel Gas Code. Exception: Detached one- and two- family dwellings not more than three stories high with separate means of egress and their accessory structures shall comply with the 2006 International Residential Code.

Sec. 5.1.030 - Building Code provisions.

Section 101.2.2 of the International Mechanical Code, as adopted by reference herein, shall be created to read as follows: The provisions of Article 2 of this Code shall apply to the construction, alteration, movement, 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.

Sec. 5.1.040. - Electrical.

Section 101.2.3 of the International Mechanical Code, as adopted by reference herein, shall be created to read as follows: The provisions of Article 4 of this Code shall apply to the installation of electrical systems, including alterations, repairs, replacement equipment, appliances, fixtures, fittings and appurtenances thereto.

Sec. 5.1.050. - Gas.

Section 101.2.4 of the International Mechanical Code, as adopted by reference herein, shall be created to read as follows: The provisions of Article 3 of this Code shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in this Code. These requirements apply to gas piping systems extending from point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

Sec. 5.1.060. - Plumbing.

Section 101.2.5 of the International Mechanical Code, as adopted by reference herein, shall be created to read as follows: The provisions of Article 3 of this Code shall apply to the installation, alterations, repairs and replacement of plumbing systems, including equipment, appliances, fixtures and appurtenances, and where connected to water or sewage systems and all aspects of a medical gas system.

Sec. 5.1.070. - Fire prevention.

Section 101.2.6 of the International Mechanical Code, as adopted by reference herein, shall be created to read as follows: The provisions of Title 15 of the Code of the City of Wichita shall apply within the city limits of the City of Wichita and Chapter 12 of the Sedgwick County Code within the Sedgwick County jurisdiction shall otherwise apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of alarm systems and fire hazards in the structure or on the premises.

Sec. 5.1.080. - Investigation fee. See Sec. 2.4.020 of this Code.

Sec. 5.1.090. – Permit fee. See Article 1.2 of this Code.

Sec. 5.1.100. - Corrections and re-inspections.

Section 107.2.3 of the International Mechanical Code is amended to read as follows: Corrections shall be completed and work rescheduled for inspection within thirty (30) days from the date of the correction notice. Corrections not completed within the thirty (30) days shall be liable for the violation penalties set forth in Article 1.2 of this Code. Access shall be provided for re-inspection by the property owner.

Sec. 5.1.110. - Stop work orders.

Section 108.5 of the International Mechanical Code, as adopted by reference herein, shall be amended to read as follows: Upon notice from the code official that mechanical work is being done contrary to the provisions of this Code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work, or shall be posted in writing at the site of the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping

the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for the violation penalties set forth in Article 1.2 of this Code.

Sec. 5.1.120. - Electrical controls.

Section 301.7 of the International Mechanical Code, as adopted by reference herein, shall be amended to read as follows: Electrical wiring, controls, and connection to equipment and appliances regulated by this Code shall be in accordance with Article 4 of this Code.

Sec. 5.1.130. - Plumbing connections.

Section 301.8 of the International Mechanical Code, as adopted by reference herein, shall be amended to read as follows: Potable water supply, building drainage system connections to equipment, and appliances regulated by this Code shall be in accordance with Article 3 of this Code.

Sec. 5.1.140. - Prohibited locations.

Section 303.3 of the International Mechanical Code, as adopted by reference herein, shall be amended to read as follows: Fuel fired appliances shall not be located in, or obtain combustion air from, any of the following rooms or spaces: 1. Sleeping rooms, 2. Bathrooms, Storage closets, Surgical rooms. Exception: This section shall not apply to the following appliances: 1. Direct-vent appliances that obtain all combustion air directly from the outdoors. 2. Solid fuel appliances, provided that the room is not a confined space and the building is not of unusually tight construction. 3. Appliances installed in a dedicated enclosure in which all combustion is taken directly from the outdoors or other approved areas. Access to such enclosure shall be through a solid door, equipped with an approved self closing device, and weather-stripped in accordance with the exterior door and leakage requirements of the International Energy Conservation Code.

Sec. 5.1.150. - Clearances from grade.

Section 304.10 of the International Mechanical Code, as adopted by reference herein, shall be amended to read as follows: Equipment and appliances installed at grade level shall be supported on a level concrete slab or other approved material extending above adjoining grade or shall be suspended a minimum of 6 inches (152 mm) above adjoining grade. Supports for heat pumps shall be at least 3" and conform to the manufactures specifications.

Sec. 5.1.160. - Equipment and appliances on roofs or elevated structures.

Section 306.5 of the International Mechanical Code is amended to read as follows:

Where equipment and appliances requiring access are installed on roofs or elevated structures, at a height exceeding 16 feet (4877 mm), such access shall be provided by a permanent approved means of access, the extent of which shall be a minimum eight (8) feet above grade to the equipment and appliances' level service space. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) high or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope).

Permanent ladders installed to provide the required access shall comply with the following

minimum design criteria:

1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
2. Ladders shall have a rung spacing not to exceed 14 inches (356 mm) on center.
3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
4. There shall be a minimum of 18 inches (457 mm) between rails.
5. Rungs shall have a minimum 0.75-inch (19 mm) diameter and be capable of withstanding 300-pound (136.1 kg) load.
6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds (488.2 kg/m²) per square foot.
7. Ladders shall be protected against corrosion by approved means. Catwalks installed to provide the required access shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms.

Exception: This section does not apply to Group R-3 occupancies.

Sec. 5.1.170. - Auxiliary and secondary drain systems.

Section 307.2.3 of the International Mechanical Code is amended to read as follows:

In addition to the requirements of Section 307.2.1, where damage to any building components could occur as a result of overflow from the equipment primary condensate removal system, one of the following methods shall be provided for each cooling coil or fuel fired appliance that produces condensate and is located above a finished ceiling or furred space:

1. An auxiliary drain pan with a separate drain shall be provided under the coils on which condensation will occur. The auxiliary drain pan shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall have a minimum depth of 1 ½ inches (38 mm), shall not be less than the unit or coil dimensions in width and length and shall be constructed of corrosion resistant material. Galvanized sheet steel pans shall have a minimum thickness of not less than 0.0236 inch (0.6010 mm) (No. 24 gage). Nonmetallic pans shall have a minimum thickness of not less than 0.0625 inch (1.6 mm).
2. A separate overflow drain line shall be connected to the drain pan provided with the equipment. Such overflow drain shall discharge to a conspicuous point of disposal to alert the occupants in the event of a stoppage in the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection.
3. An auxiliary drain pan without a separate drain line shall be provided under coils on which condensate will occur. Such pan shall be equipped with a water-level detection device conforming to UL 508 that will shut off the equipment served prior to overflow of the pan. The auxiliary drain pan shall be constructed in accordance with Item 1 of this section.

4. A water-level detection device conforming to UL 508 shall be provided that will shut off the equipment served in the event that the primary drain is blocked. The device shall be installed in the primary drain, the overflow drain line, or in the equipment-supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan.

Exception: Fuel fired appliances that automatically shut down operation in the event of a stoppage in the condensate drainage system.

Sec. 5.1.175. – Ventilation Required.

Section 401.2 of the International Mechanical Code is amended to read as follows:

Every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical means in accordance with Section 403.

Sec. 5.1.180. - Grease duct test.

Section 506.3.3.1 of the International Mechanical Code is amended to read as follows: Prior to the use or concealment of any portion of a grease duct system, a leakage test shall be performed in the presence of the official. Ducts shall be considered to be concealed where installed in shafts or covered by coatings or wraps that prevent the ductwork from being visually inspected on all sides. The permit holder shall be responsible to provide the necessary equipment and perform the grease duct leakage test. A light test or an approved equivalent test method shall be performed to determine that all welded and brazed joints are liquid tight. A light test shall be performed by passing a halogen lamp having a power of not less than 100 watts through the entire section of the ductwork to be tested. The lamp shall be open so as to emit light equally in all directions perpendicular to the duct walls. A test shall be performed for the entire duct system, including the hood-to-duct connection. The ductwork shall be permitted to be tested in sections provided that every joint is tested. For listed factory-built grease ducts, this test shall be limited to duct joints assembled in the field and shall exclude factory welds.

Sec. 5.1.190. - Grease duct enclosure.

Section 506.3.10.1 of the International Mechanical Code is amended to read as follows: Commercial kitchen grease ducts constructed in accordance with Section 506.3.1 shall be permitted to be enclosed in accordance with the International Building Code requirements for shaft construction. Such grease duct systems and type one hoods shall have a clearance to combustible construction of not less than 18 inches (457 mm), and shall have a clearance to noncombustible construction and gypsum wallboard attached to noncombustible structures of not less than 3 inches (76 mm). Duct enclosures shall be sealed around the duct at the point of penetration and vented to the outside of the building through the use of weather-protected openings. Exceptions: 1. The shaft enclosure provisions of this section shall not be required where a duct penetration is protected with a through-penetration fire stop system classified in accordance with ASTM E 814 and having an "F" and "T" rating equal to the fire-resistance rating of the assembly being penetrated and where the surface of the duct is continuously covered on all sides from the point at which the duct penetrates a ceiling, wall, or floor to the outlet terminal with a classified and labeled material, system, method of construction or product specifically evaluated for such purpose, in accordance with ASTM E 2336. Exposed duct wrap systems shall be protected where subject to physical damage. 2. The shaft enclosure provisions of this section shall not be required where a duct

penetration is protected with a through-penetration fire stop system classified in accordance with ASTM E 814 and having an "F" and "T" rating equal to the fire resistance rating of the assembly being penetrated and where a prefabricated grease duct enclosure assembly is protected on all sides from the point at which the duct penetrates a ceiling, wall, or floor to the outlet terminal with a classified and labeled prefabricated system specifically evaluated for such purposes in accordance with UL 2221. (3) A duct enclosure shall not be required for a grease duct that penetrates only a nonfire-resistance-rated roof/ceiling assembly.

Sec. 5.1.200. - Operation.

Section 507.2.1.1 of the International Mechanical Code, as adopted by reference herein, shall be amended to read as follows: Type 1 hood systems shall be designed and installed to automatically activate the exhaust fan whenever cooking operations occur. The activation of the exhaust fan shall occur through an interlock with the cooking appliances, by means of heat sensors or by means of other approved methods. The system shall be designed by a registered design professional and submitted for plan review with the complete construction document package.

Sec. 5.1.210. - Corridors.

Section [B] 601.2.1 of the International Mechanical Code, as adopted by reference herein, shall be created to read as follows: A corridor shall not be used as a plenum or integral part of a duct system to convey air to or from one part of a building to another if the corridor is required to be of fire-resistive construction by the Code. However, air may be supplied to such a corridor for the purpose of comfort conditioning, ventilation, exhausting or other reasons and may be returned or exhausted provided all such supply, return or exhaust openings be protected as required by other parts of this Code and not be in violation of this provision.

Exception: Make up air for exhaust from rest rooms and janitors closets opening on to and adjacent to a corridor of fire resistant construction, may be transferred from the corridor provided such transfer means are protected in the manner prescribed by other parts of this Code and such corridor is supplied directly, or through the system supplying the corridor, with outdoor air at a rate greater than the rate of makeup air taken from the corridor.

Sec. 5.1.215. – Metallic Ducts.

Section 603.4 of the International Mechanical Code is amended to read as follows: All metallic ducts shall be constructed as specified in the SMACNA HVAC Duct Construction Standards - Metal and Flexible.

Sec. 5.1.220. - Return air systems.

Section 606.2.1 of the International Mechanical Code, as adopted by reference herein, shall be amended to read as follows: Smoke detectors shall be installed in the return or the supply of air systems with a design capacity greater than 2,000 cfm (0.9 m³/s). On the return side it shall be located in the return air duct or plenum upstream of any filters, exhaust air connections, outdoor air connections, or decontamination equipment and appliances. On the supply side the smoke detector shall be located before the first branch or take off.

Exception: Smoke detectors are not required in the return or supply systems where all portions of the building served by the air distribution system are protected by area smoke detectors connected

to a fire alarm system, approved by fire department, and the area smoke detection system shall comply with Section 606.4.

Sec. 5.1.230. - Hydronic piping—Scope.

Section 1201.1 of the International Mechanical Code, as adopted by reference herein, shall be amended to read as follows: The provisions of this chapter shall govern the construction, installation, alteration and repair of hydronic piping systems. This chapter shall apply to hydronic piping systems that are part of heating, ventilation and air-conditioning systems. Such piping systems shall include steam, hot water, chilled water, steam condensate and ground source heat pump loop systems. Potable cold and hot water distribution systems shall be installed in accordance with Article 3 of this Code.

Sec. 5.1.240. - Classifications.

Class "A-C" (air conditioning and warm air heating) This class includes air handling equipment and air distributions, chilled water systems, warm air heating systems whereby heating is accomplished by distributing heated air by forced or gravity circulation or by radiation, including controls and other items pertaining thereto.

Class "RF" (refrigeration) - This class includes refrigeration systems and refrigeration equipment of all types.

Class "Journeyman sheet metal installer" is a classification for any individual working for a licensed contractor as defined in Sec. 1.250 and who is duly certified as herein set forth to engage in such occupation. Journeyman sheet metal installer is limited to perform the following types of installations

- (1) The placement and installation of the furnace, air conditioning, or other air handling equipment, this does not include any connections of line voltage electricity, fuel gas piping or refrigeration piping;
- (2) The installation of the complete air distribution system as defined in this code;
- (3) The installation of the products of combustion venting systems as defined in this Code.

Exception 1: "Journeyman residential mechanic" is a limited classification for an individual working for a contractor of a class as set forth in Sec. 1.250 and who is duly certified as herein set forth to engage in such occupation. Journeyman residential mechanic is limited to perform the following types of installations:

1. One and two family residential new construction only;
2. The placement and installation of the furnace, air conditioning or other air handling equipment that pertains to residential use. This does not include gas piping or line voltage electricity.

Sec. 5.1.250. - Definitions.

Unless otherwise specified, the following terms, as used in this chapter, mean as follows:

'Apprentice' means an individual who works as an employee in training under the direct

supervision of a Journeyman or Master. An Apprentice is not a certified individual.

'Board' means the board of appeals appointed for air conditioning, refrigeration, warm air heating, and boilers. Their purpose is reviewing code interpretations taken by the building code enforcement division, granting or denying variances requested from the code, other matters pertaining to mechanical, reviewing license applications and license suspensions and revocation.

'Code' means the International Mechanical Code as adopted by the MABCD, as the context of this Article may require.

'Direct supervision' means that the apprentice is limited to the same structure and/or building site as the Journeyman or Master, except in the case of one- and two-family residential development, where the apprentice may be on the job site within 100 feet of where the Journeyman or Master is working.

'Field Experience' means working under the direct supervision of a person having a valid Journeyman or Master certificate or attending trade related schooling. No more than one year of the requirement may be satisfied by trade related schooling. Schooling shall consist of a minimum of 240 hours classroom training.

'Journeyman' means an individual working for a licensed contractor as defined in Sec. 1.250 and engaged principally in the occupation of erecting, installing, altering, repairing, servicing or maintaining in any or all of the following classifications and who is duly certified as herein set forth to engage in such occupation: A Journeyman is responsible for the supervision of any apprentice assigned to work with him.

'Licensed contractor' means a person, firm, partnership, corporation, limited liability company, association or combination thereof, who undertakes or offers to undertake for another, for hire, the planning, laying out, supervising and installing or making additions, alterations, and repairs in the installation of mechanical heating, ventilation, refrigeration and air conditioning systems.

'Licensed trade' or *'trade'* means the mechanical, electrical, plumbing or gas fitting trade, as the context of this article may require.

'Master' means an individual that holds a Master certificate issued pursuant to this article evidencing such person to be qualified to lay out, install, maintain and repair work in his area of expertise. A Master is responsible for the supervision of any apprentice assigned to work with him.

'Qualified Master' means an individual who holds a Master certificate issued pursuant to this article evidencing such person to be qualified to control and have authority of all technical work performed under the authority of the licensed contractor's enterprise, and assures quality control and is responsible for complying with all applicable laws, codes and regulations. An individual shall not be the Qualified Master for more than one licensed contractors enterprise unless such individual receives approval from the Director of the MABCD or an authorized representative thereof.

Sec. 5.1.260. - Apprentice limitations.

(a) Apprentices shall be permitted to work when accompanied by and under the direct supervision of a Master or Journeyman, who shall be responsible for the mechanical work performed by the Apprentice. At any given time, there shall be a maximum of two Apprentices per one Master or one Journeyman for all one or two-family dwelling residential job sites. There shall be a maximum of three Apprentices per one Master or one Journeyman for all triplex or greater density residential job sites or commercial job sites. The on-site Master or Journeyman shall be responsible for maintaining the ratio of Master/Journeyman to Apprentices as required by this section. If an Apprentice works without the required supervision, both the Qualified Master, and the Apprentice may be held responsible for violation of this section.

(b) It shall be unlawful for any Qualified Master, to allow or permit an uncertified individual to engage in the business of erecting, installing, altering, repairing, servicing or maintaining air conditioning, warm air heating or refrigeration.

Sec. 5.1.270. - Applicant requirements, examinations; issuance of certificates.

Any person desiring to engage in or work at the business of air conditioning, refrigeration or warm air heating either as a Master or as a Journeyman, as defined in Sec. 5.1.250 of this Code, or to do such work shall submit the prescribed application form to the Office of the MABCD for a certificate, and if the applicant meets the following requirements or is approved by the Board, shall at such time and place as directed be subjected to an examination as to their qualifications. The qualifications are as follows:

- a. A minimum score of seventy-five percent on the "Block Examination" Master/Journeyman Mechanical Certificate, which is administered by Prometric, or
- b. A minimum score of seventy-five percent on the International Code Council Examination for a Master/Journeyman Mechanical Certificate, which is administered by International Code Council, or
- c. A satisfactory score on any other standard examination to determine the qualification of a Master/Journeyman Mechanical that is approved and adopted by the state of Kansas, pursuant to state law, following the effective date of this Code.

Applicant requirements:

Journeyman Mechanical: One year Field Experience and completion of a technical heating and air conditioning school, or two years Field Experience. Schooling shall consist of a minimum of 240 hours.

Master Mechanical: Two years as Journeyman or a minimum of four years Field Experience."

Sec. 5.1.280. - Fees for examination, certificates, etc.; renewing and expiration of certificates.

(a) The fee for the original certificate of a master mechanical, journeyman mechanical, or sheet metal installer shall be established by the Director of the MABCD to cover the administrative costs

(b) of issuing such certificates. This fee shall be paid to the Office of the MABCD when the application for a certificate is made. Individuals not holding a certificate at the beginning of the certificate cycle, who obtain a certificate during such certificate cycle by the standardized test required by

K.S.A. 12-1542 and any amendments thereto, will be issued the initial certificate without documentation of continuing education. Such certificate will be issued noting the test provider, specific test type and grade. Such test shall be completed during the certificate cycle. All such certificates shall expire on the thirty-first of December of each odd numbered year. The biennial fee for all certificates shall be established by the Director of the MABCD to cover the administrative cost of issuing such certificates. All such certificates shall be renewed bi-annually upon payment established by the Director of the MABCD to cover the administrative costs of issuing such certificates. All certificates shall expire on the thirty-first day of December of each odd-numbered year and no reduction shall be made for part of the year being elapsed. Any holder of a certificate who fails to renew the same by March 1st after their expiration shall be required to submit one of the following: (1) Proof of passing a new examination in accordance with K.S.A. 12-1541 or; (2) Proof completing an additional 11/2 hours of continuing education for each 3 month period the renewal is late and only when the original certificate was issued pursuant to K.S.A. 12-1542. It is the total responsibility of the certificate holder to assure that his/her certificate has been renewed and is valid.

(b) Individuals passing the examination in the first year of a renewal cycle will need to provide documentation of 12 hours of approved continuing education when renewing their certificate. Not less than 6 hours shall consist of mechanical code education. The continuing education shall be attended during the certificate cycle. Individuals passing the examination in the second year of a renewal cycle will need to provide documentation of 6 hours approved continuing education when renewing their certificate. Not less than 3 hours shall consist of mechanical code education. The continuing education shall be attended during the second year of the certificate cycle. Individuals with an active certificate that passed the examination prior to the first year of the renewal cycle must provide written proof of having completed biennially not less than 12 hours of continuing education approved by the Office of the MABCD. Not less than 6 hours shall consist of mechanical code education. Continuing education shall be provided by the Office of the MABCD or a nationally recognized trade association, community college, technical school, technical college or other provider approved by the Office of the MABCD. All 12 hours of education shall comply with the Office of the MABCD's continuing education guidelines for mechanical.

Sec. 5.1.290. - Owner occupants—Minor repairs.

Regardless of the requirements of other sections of this title, the owner-occupant of a single-family dwelling may obtain permits to repair, replace, or maintain the existing air conditioning, refrigeration, or warm air heating systems in such single-family dwelling and the usual accessory buildings in connection with such dwelling; provided, however, that the owner-occupant shall perform all such work and that the work so performed is in accordance with the Code as verified by an inspection requested by such owner-occupant and performed by the Office of the MABCD. No permit shall be required for minor repairs or alterations which do not exceed two hundred dollars as the price charged for such work, but such work shall comply with all requirements of this Code.

Sec. 5.1.300. - Owner-occupants permit, fee, examination, and requirements.

The owner-occupant of a detached single-family dwelling occupied or to be occupied by the owner-occupant applying for the permit may be permitted to install air-conditioning, refrigeration, and warm air heating systems in the main structure and accessory structures thereto provided all materials are purchased and all labor is performed by the applicant.

Owner-occupants applying for permits for installations as outlined above shall first qualify themselves by successfully passing a simplified open book examination dealing with relevant provisions of this Code. Successful passage of the examination shall qualify the applicant for future permits until the time of adoption of another edition of this Code.

Prior to permit approval, the applicant shall also submit a plan of the installation drawn in a format acceptable to and drawn in sufficient detail as to satisfy the Director of the MABCD of the overall code compliance of the anticipated installation.

Permit fees shall be as set forth elsewhere in this Code and in Article 2 of this Code provided, however, that each additional inspection owing to detected code deficiencies requiring correction shall be billed at the rate of forty dollars each.

Permits for installations in completely new residences and/or total remodel permits shall be limited to one in three years to each applicant unless a waiver is obtained, upon written application, from the Board.

Sec. 5.1.310. - Revocation of certificates and licenses.

The Board is authorized to cancel and recall the certificate of any air-conditioning, refrigeration, warm air heating or boiler contractor or Journeyman for any or all of the following reasons:

1. Committing of any act in violation of any provision of this Code or any other ordinance of the city or the refusal or failure to comply with any lawful and reasonable order of the Director of the MABCD or inspector.
2. Misrepresentation of a material fact by the applicant in obtaining a certificate.
3. Carelessness or negligence in providing reasonable safety measures for the protection of the public.

The Board is hereby authorized to cancel and recall the license of any air conditioning, refrigeration, warm air heating or boiler contractor for any or all of the following reasons:

1. Abandonment of any contract without legal cause.
2. Diversion of funds or property received for performance or completion of a specific contract or a specific purpose in the performance or completion of any contract, obligation or purpose, or the failure, neglect, or refusal to use such funds or property for the performance or completion of the contract.
3. Committing any act in violation of any provision of this Code or any other ordinance of the city or resolution of the county, or the refusal or failure to comply with any lawful and reasonable order of the Director of the MABCD or inspector.

4. Misrepresentation of a material fact by the applicant in obtaining a license.
5. Failure of any contractor to fully certify all claims for labor and materials used in the performance of any work for which he has been engaged or for which he has been paid.
6. Fraudulent use of the license to obtain a permit for another.
7. Carelessness or negligence in providing reasonable safety measures for the protection of workmen and the public.
8. Failure to obtain permits as required in Sec. 5.1.300 of this Code.
9. Unreasonable delay in the performance and carrying out of any contract.
10. Failure by the licensee to have at least one active member or officer deemed as the Qualified Master, as defined in Sec. 5.1.250 of this Code.

Upon presentation by the Director of the MABCD to the Board charges against any holder of any certificate as set forth in this section, the Board shall fix a time and a place for a meeting to consider such charges and shall notify the holder of such license to be present at such meeting. Such notification shall be in writing and shall be presented to the holder at least five days in advance of the meeting. If upon full hearing of all evidence by the Board, it shall be decided that such holder of a certificate has been guilty of the actions as herein before set forth in this section, then the board shall revoke or suspend the license or certificate of the holder thereof.

When a certificate of a person has been revoked, a new certificate shall not be granted until he or she has corrected the violation in accordance with this Code and shall have made application and shall have passed an examination as required for the original certificate.

Sec. 5.1.320. - Certain persons exempt from license and bond requirements.

Any person, corporation, limited liability company, partnership or similar entity not engaged in the business of heating and/or air conditioning within the scope of this Code who has in his/her regular and permanent employment a person or persons who possess current and valid Journeyman or Master certificates shall be permitted to have such person or persons perform maintenance and repair work on buildings and premises that are owned, leased, operated or managed by him shall be exempt from this Code, as pertains to license or bond, but shall be subject to all other requirements pertaining thereto.

Sec. 5.1.330. - Licenses.

Anyone authorized individual or entity seeking to engage in the business of mechanical heating, air conditioning or refrigeration shall first designate an individual to be the Qualified Master for their license and then acquire a license from the Office of the MABCD. Each such license shall expire on thirty-first day of December in the year the license was issued.

Sec. 5.1.340. – Insurance required. See [Article 1.4\(c\)](#) of this Code.

Sec. 5.1.350. - Contractors—Established place of business required. See [Article 1.4\(a\)](#) of this Code.

Sec. 5.1.360. - Contractors—Marking of vehicles. See [Article 1.4\(b\)](#) of this Code.

Sec. 5.1.370. - Truth in advertising requirements. See [Article 1.4\(d\)](#) of this Code.

Sec. 5.1.380. - Compliance with titles, ordinances, laws.

All air conditioning, refrigeration or warm air heating installations shall comply with existing laws and ordinances covering the construction and installation of cooling towers, the use of city water, sanitary and storm sewers, the requirements for recirculation of condenser water, as contained in the following parts of this Code, and any other that may apply:

Water conservation—Title 17 of the Code of the City of Wichita;

Connection to sanitary sewer—Title 16 of the Code of the City of Wichita;

Towers, spires and tanks—Article 2 of this Code;

Gas burning warm air furnaces—Article 2 of this Code;

Ducts and appurtenances—Article 2 of this Code;

Cooling units over public property—Article 2 of this Code;

Gas fittings—Article 3 of this Code.

Sec. 5.1.390. - Electrical and plumbing work.

All electrical work, plumbing and gas fitting done in connection with any work covered by this Code shall be in conformance with Article 3 and Article 4 of this Code, respectively. It is also unlawful for a person holding a license, as set forth in this Code, to operate as a contractor or as a journeyman mechanic to do or otherwise perform any electrical, plumbing or gas fitting work except as provided in this section. Such contractor or mechanic shall be permitted to do all water piping within the system, and make indirect connections to the city sewer, but shall not make direct connections to either the city water system or to city sewers.

It shall be permissible for a holder of a Class A-C or RF certificate to make original installations of package units of a capacity of seven and one-half horsepower or less on the load side of the disconnect means when such is not over five feet from the unit and is within sight thereof. It shall also be permissible for such a person to do all electrical work in connection with maintenance, repairs or replacement on any system from the load side of the disconnect means of the unit. All such electrical work shall conform in all respects to the requirements of Article 4.

Article 5, Section 2 - SOLID FUEL-BURNING EQUIPMENT

Sec. 5.2.010. - Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Solid fuel-burning equipment for the purpose of this chapter, means any factory-built fireplace, including chimney liners, vents and connectors, fireplace inserts (non-gas) and free-

standing fireplace stoves which use wood, pellets or coal for fuel.

- (1) *Gas fireplace equipment* shall mean gas fireplaces, including chimney liners, vents and connectors, fireplaces with gas starters, and direct or natural vent fireplaces.
- (2) *Gas fireplace contractor* shall mean any individual who has been duly qualified by the Office of the MABCD to engage in or work in the trade of installing, repairing or replacing gas fireplace equipment.
- (3) *Solid fuel contractor* for the purpose of this chapter, means any individual who has been duly qualified by the Office of the MABCD to engage in or work at the trade of installing, repairing or replacing solid fuel-burning equipment.

Sec. 5.2.020. - Certificate—Examination required.

- (a) It is unlawful for any person in the business of installing, repairing or altering solid fuel-burning or gas fireplace equipment in the City or County, as applicable, unless and until a certificate has been obtained therefore, and a license has been issued for such business and a permit has been issued for such work, all in accordance with the provisions of this code. Apprentices shall be permitted to work when accompanied by and under the direct supervision of a master or journeyman solid fuel or gas fireplace contractor, who shall be responsible for the work done by the apprentice. There shall be a maximum of three apprentices per one master or journeyman.
- (b) Any person desiring to engage in or work at the business of installing, repairing or altering solid fuel-burning equipment or gas fireplace equipment shall make application to the Office of the MABCD for a certificate.
- (c) No certificate shall be issued to any individual who is not certified by the National Fire Institute in one or more of the following areas:
 - (1) NFI Gas Specialist;
 - (2) NFI Wood-burning Specialist;
 - (3) NFI Pellet Specialist.
- (d) A journeyman's certificate shall not be issued to any individual with less than one year's experience as an apprentice.

Individuals wanting a master's certificate for gas fireplace and solid fuel shall be required to be certified by the National Fire Institute as both a gas and wood-burning specialist.

- (e) Individuals holding a journeyman or master's mechanical (A-C) certificate are not required to obtain a SF-P, SF-W or GF certificate to install solid fuel or gas fireplace equipment.

Sec. 5.2.030. - Certificate—Classification.

- (a) The certificate issued to an individual wishing to engage in the business of installing, repairing or replacing solid fuel wood-burning equipment shall be known as a class 'SF-W' certificate and shall authorize such individual, upon his complying with Section A.2.060, to engage in such business.

(b) The certificate issued to an individual wishing to engage in the business of installing, repairing or replacing solid fuel pellet-burning equipment shall be known as a class 'SF-P' certificate and shall authorize such individual, upon his complying with Section A.2.060, to engage in such business.

(c) The certificate issued to an individual wishing to engage in the business of installing, repairing or replacing gas fireplace equipment shall be known as a class 'GF' certificate and shall authorize such individual, upon his complying with Section A.2.060, to engage in such business.

(d) It shall be unlawful for any individual or contractor to engage in the business of installing, repairing or replacing solid fuel-burning equipment in the city or county, as applicable, unless and until a certificate has been obtained therefor and a license has been issued for such business and a permit has been issued for such work, all in accordance with the provisions of the Code.

(e) It shall be unlawful for any individual or contractor to engage in the business of installing, repairing or replacing gas fireplace equipment, unless and until a certificate has been obtained therefor and a license has been issued for such business and a permit has been issued for such work, all in accordance with the provisions of the Code.

Sec. 5.2.040. - Certificates—Fees—Expiration—Duration.

(a) The fee for each examination and original certificate of class 'SF-W', 'SF-P' or 'GF' shall be established by the Director of the MABCD to cover the administrative costs of issuing such certificates. All such certificates shall be renewed bi-annually upon payment of a fee established by the Director of the MABCD to cover the administrative costs of issuing such certificates. All certificates shall expire on the thirty-first day of December of each odd-number year and no reduction shall be made for part of the year being elapsed. Certificates which have not been renewed by March 1st after their expiration may be subject to reexamination and/or board appearance prior to reissuance of a certificate.

(b) All applicants for renewal must provide their current NFI certificate as required in Section 5.2.20 of this Code.

Sec. 5.2.050. - Application of related provisions of this code and additional codes adopted by reference.

All solid fuel-burning equipment and gas fireplace equipment installations, repairs or replacements shall comply with existing laws and ordinances as contained in the following parts of this Code and any other that may apply:

Mechanical Code - Article 5 of this Code;

Plumbing Code – Article 3 of this Code;

Electrical Code - Article 4 of this Code;

Building Code – Article 2 of this Code.

Sec. 5.2.060. - License requirement. See [Article 1.2](#) of this Code

Sec. 5.2.070 – Insurance required. See [Article 1.4\(c\)](#) of this Code.

Sec. 5.2.080. - Truth in advertising requirements. See Article [1.4\(d\)](#) of this Code.

Article 5, Section 3 - PREFABRICATED ASSEMBLIES

Sec. 5.3.010. - Definitions.

The following definitions shall apply in the interpretation of this chapter:

- (1) "Prefabricated assembly" means a structural unit, the integral parts of which have been built up or assembled prior to incorporation in the building or to being erected as a building unit.
- (2) "Approved agency" means an established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the Director of the MABCD.

Sec. 5.3.020. - Certificate of approval.

A certificate of approval by an approved agency shall be furnished with every prefabricated assembly, except where the assembly is readily accessible to inspection at the site. The certificate of approval shall certify that the assembly in question has been inspected and meets all the requirements of Article 5 of this Code.

Sec. 5.3.030. - Field erection.

Placement of prefabricated assemblies at the building site shall be inspected by the mechanical inspector to determine compliance herewith.

Sec. 5.3.040. - Master mechanic's certificate or approved agency certification.

The installation of air conditioning and warm air heating equipment within or on any prefabricated assembly to be erected within the City or County, if applicable, shall be performed under the supervision of a person who has secured a master mechanic's certificate as set forth in Sec. 1.330, or shall have been factory installed and inspected by an agency approved by the building official.

Sec. 5.3.050. - Permits and fees.

Permits are to be obtained under Article 1.2 of this Code.