ORDINANCE NO. 24,439

CHAPTER 12

BUILDING CODE

ARTICLE VII. RESIDENTIAL CONSTRUCTION*

DIVISION 1. 2009 INTERNATIONAL RESIDENTIAL CODE
FOR ONE AND TWO FAMILY DWELLINGS*

§ 12-171. Title. Provisions of this chapter shall be known and may be cited as the “Oklahoma City Residential Code”, “Residential Code” or “this Code”.

§ 12-172. Intent. International Residential Code For One and Two Family Dwellings adopted. For the purpose of prescribing rules and regulations governing the fabrication, erection, construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location and demolition of detached one- and two-family dwellings, townhouses not more than three stories above-grade in height with a separate means of egress, their appurtenances and accessory structures and providing for basic minimum provisions considered necessary to protect the health, safety, and general welfare through affordability, structural strength, means of egress facilities, stability, sanitation, light and ventilation and safety to life and property from fire and other hazards attributed to the built environment of the citizens of the City of Oklahoma City, a residential code known as the International Residential Code for one and two family dwellings, being more specifically the 2009 Edition thereof, as amended by Resolution of the Council of the City, duly adopted and signed by the Mayor on May 3, 2012, three copies of which, each together with said resolution, having been and now filed in the
office of the City Clerk, and the same as so amended and changed is hereby adopted and incorporated and considered as a part of the code.

§ 12-173. Summary. Pursuant to the authority granted by Section 26, Article II of the Charter of the City of Oklahoma City, the title and a brief gist or summary of the provisions of this Code as amended are hereby ordered published in conformity with the provisions of said Section 26, Article II of the Charter, and for the purpose of such publication a summary of the provisions of said Code is hereby given as follows:

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§ 12-174. Penalty.

As set forth in section 12-57 of this Chapter.

§ 12-175. Building permit fees for charitable organizations. No building permit fee shall be required for the construction or remodeling of any one- or two-family dwelling by a nonprofit charitable organization, as defined in Chapter 13 of the Oklahoma Municipal Code 2010, for the purpose of providing housing assistance to a low-income person or household as defined in 24 CFR 570.3.
ARTICLE VIII. ADMINISTRATION AND ENFORCEMENT*

DIVISION 1. ADMINISTRATION*

§ 12-197. General.

As set forth in sections 12-53 thru 12-61 of this Chapter.

DIVISION 2. PERMIT*

§ 12-198. Permits required.

As set forth in sections 12-67 thru 12-71 of this Chapter.

§12-199. Insurance Certificates Required.

(a) Prior to the issuance of a residential building permit as defined in 11 O.S. § 43-109.2, applicant must submit a certificate of insurance indicating the contractor has general liability insurance in an amount required by other construction trade contractors licensed by the Construction Industries Board, and that the contractor has workers compensation insurance in an amount required by state law or a workers compensation exemption verification document.

(b) Exemptions. The insurance requirements of this section shall not apply to a person or persons performing the construction or remodeling to his, her or their own existing single family or duplex structure on their own property, unless such modifications are being performed by or the permit was acquired by a general contractor or subcontractor, in which case the general contractor or subcontractor
must meet the requirements set forth in this section.
(c) **Registration.** Each contractor required by this section to submit a certificate of insurance must annually register with the City’s Public Works Director or his/her designee for the purpose of monitoring the insurance requirements of this section. Each contractor shall be required to register each calendar year.
(d) **Fee.** The registration fee shall be as established in Chapter 60 General Schedule of Fees.

DIVISION 3. FEES*  

§ 12-200. Fees.

As set forth in sections 12-91 thru 12-92 of this Chapter.

ARTICLE IX. RESIDENTIAL BUILDING CODE COMMISSION*  

DIVISION 1. MEMBERSHIP, POWERS AND DUTIES, ETC.

§ 12-201. Created. There is hereby created within and for the City a Residential Building Code Commission, with the powers and duties as hereinafter set forth.

§ 12-202. Membership. The Residential Building Code Commission for detached one- and two-family dwellings shall consist of seven members appointed by the Mayor with the consent and approval of the City Council. All members shall be residents of the State of Oklahoma and shall serve without compensation, and shall hold no other municipal office. Each member shall be familiar with this Code. One member shall be an architect or engineer, duly licensed by the state, two residential
designers, two residential building contractors, and two residents of the City who have no direct or indirect financial interest in any industry regulated by the building codes. Nothing contained herein shall affect the present appointments or terms of appointment.

§ 12-203. Term of office. The term of office for each commissioner of the Residential Building Code Commission shall be for three years or until a successor is appointed.

§ 12-204. Vacancies. Vacancies on the Residential Building Code Commission shall be filled for the remainder of the unexpired terms in the manner in which the original appointments were made.

§ 12-205. Consecutive absences. A member of the Residential Building Commission shall be considered to have resigned if he/she fails to attend three consecutive meetings unless the other members of the Commission notify the Mayor in writing that they believe the member to have been absent for a good cause and recommend the appointment be continued.

§ 12-206. Removal from office. Members of the Residential Building Code Commission may be removed by the Mayor with the consent of the Council after notice to the member and a public hearing.

§ 12-207. Alternate members. The Mayor may appoint two alternate members to the Residential Building Code Commission with the approval of the Council, who shall be called by the Commission chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall be residents of the State who have no direct or indirect financial interest in any industry regulated by the City’s building Code, and shall be
appointed for three years or until a successor has been appointed.

§ 12-208. Meetings. The Residential Building Code Commission for detached one- and two-family dwellings shall adopt rules in accordance with the provisions of this Code. The Commission shall have meetings at the call of the Chairperson and at such other times as the Commission may determine. At the first meeting and annually thereafter the Commission shall elect a Chairperson and a vice-chairperson to serve for a period of one year or until their successors is elected. All meetings of the Commission shall be open to the public. The Commission shall keep minutes of its meetings showing the vote of each member upon each question or, if a member is absent or failing to vote, indicating such act, and shall keep records of its official actions, all of which shall be immediately filed in the office of the Development Services Director, or designated representative and shall be a public record.

§ 12-209. Four votes required. A concurring vote of four members of the Commission shall be necessary on any decision or determination of the Commission.

(a) Review of Residential Building Code. The Commission shall, from time to time, review the Residential Building Code and all resolutions and ordinances pertaining thereto and consider any changes which may be required due to the introduction of new materials, equipment or technology or which may be requested by the Chief Plans Examiner, Chief Building Inspector, members of technical trades, contractors or the general public. Such changes as the Commission deems appropriate shall be recommended to the Council in writing.
(b) Other duties. The Commission shall have such other powers and duties as are provided by ordinance.

DIVISION 2. RESIDENTIAL BUILDING CODE APPEALS BOARD*

§ 12-211. Appeal Board.

As set forth in sections 12-111 thru 12-121 of this Chapter.

§ 12-212. Appeal Procedures.

As set forth in section 12-132 thru 12-135 of this Chapter.

ARTICLE X. FALLOUT OR TORNADO SHELTERS*

§ 12-231. Building permit.

(a) No fallout or tornado shelter shall be constructed within the City unless a building permit has been issued by the Development Services Director or designated representative.

(b) No building permit for the construction of a fallout or tornado shelter shall be issued until plans and specifications for each type shelter have been approved by a registered professional engineer or architect, and/or the Development Services Director, or designated representative, as conforming to the standards and specifications as set forth in this article.

(c) A fee for the permit required for the building, erection or installation of a fallout shelter shall be paid to the City. The amount of such fee shall be as established in Chapter 60, the General Schedule of Fees.

§ 12-232. Flotation. No preshaped fallout or tornado shelter such as metal, plastic, wood, Plexiglas, etc., shall be approved unless the design is sufficient to prevent flotation when
the shelter is empty and flotation force is considered to be 100 percent. Weight of earthen fill shall not be considered in reducing this flotation factor.

§ 12-233. Shelters in front yard.
(a) All fallout or tornado shelters constructed in front yards shall be completely below established grade with the exception of one air intake pipe and hood which may extend three feet above grade, and one exhaust pipe and hood which may extend four feet above established grade. Entranceways may extend not more than one foot above established grade and shall be provided with a metal or metal-clad door.
(b) All underground fallout or tornado shelters constructed in front yards shall be provided with a locking device.
(c) No underground shelters constructed in front yards shall be used for any type of occupancy other than as an underground fallout or tornado shelter.

§ 12-234. Concrete compression ratio. All concrete used in construction of underground fallout and tornado shelters shall have a compressive strength of not less than 3,500 pounds per square inch.

§ 12-235. Waterproofing. All fallout or tornado shelters shall be adequately waterproofed to prevent seepage.

§ 12-236. Inside dimensions of fallout shelters. All fallout shelters shall contain a minimum of 50 square feet of floor area, with an inside height of not less than six feet, three inches.

§ 12-237. Protection factor for fallout shelters. All fallout shelters shall have a protection factor, which is obtained by not less than 12 inches solid concrete or not less
than 18 inches of compacted earth, or equivalent combination thereof.

§ 12-238. Other provisions applicable to underground fallout shelters.
(a) All underground fallout shelters shall be provided with a baffle wall affording at least one right angle turn into the living area.
(b) All underground fallout shelters shall be constructed of sufficient mass for the shelter's designed category rating.
(c) All underground fallout shelters shall be equipped with a ventilation system producing not less than five cubic feet per minute, per person, of fresh air.

ARTICLE XI. SMOKE DETECTORS*

§ 12-251. Definitions. The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:
(1) Hotel/motel means any building containing six or more guestrooms intended or designed to be used, or which are used, rented or hired out to be occupied or which are occupied for sleeping purposes by guests.
(2) Residential structure means any building used or intended for supporting or sheltering any residential use except those existing structures used as a single-family dwelling.
(3) Single-family dwelling means a freestanding and structurally separated building that is used exclusively as a single-family residence.
(4) Smoke detector means a smoke-sensitive warning device complying with the new construction smoke detector reference of Section 907 of the International Building Code in force in the City.

§ 12-252. Required in certain buildings.
(a) All occupied structures, except those classified as detached single-family dwelling residential, temporary, and miscellaneous by the International Building Code, in force in the City, and not equipped with smoke detection, fire alarm, and/or fire suppression systems as required by the International Building Code, shall be fitted or retrofitted with smoke detectors installed in conformance with the manufacturer's specifications, which, when activated, give an audible alarm. The smoke detectors shall be installed in sufficient numbers and locations so as to insure the alarm is audible in all portions of the structure.

(b) The smoke detector shall be provided and installed in good working order by the owner of the structure.

(c) The smoke detector shall be maintained in good working order by the occupant of the structure.

§ 12-253. Hotels/motels and residential structures. All hotels/motels and residential structures constructed prior to the building code new construction requirement for smoke detector inclusion shall have a minimum of one approved smoke detector installed in a manner and location which would qualify it for a building permit under current procedures for smoke detector approval in new construction. When actuated, such detector shall be suitable to warn the occupants of said structures of the presence of smoke and the possibility of fire danger.

§ 12-254. Responsibility for installation and maintenance. A smoke detector shall be provided and installed in good working order by the owner of the hotel/motel, residential structure, or single-family dwelling. The smoke detector shall be maintained in good working order by the owner(s) of the hotel/motel and by the owners or occupants of
§ 12-255. Violation. Failure to install or maintain smoke detectors in a hotel/motel, residential structure, or single-family dwelling shall deem the structure or noncomplying portion of said structures uninhabitable.

ARTICLE XII. INSULATION CONTRACTORS*

DIVISION 1. GENERALLY*

§ 12-270. Purpose. The purpose of this article is to license, bond, and regulate insulation contractors.

§ 12-271. Compliance with certain standards. All insulation contractors shall comply with all City energy codes and practices and changes thereof.

§ 12-272. Furnishing City technical data; placement of such data on attic access. Insulation contractors shall provide the Department of Development Services with a signed copy of installed materials, trade names, engineering specifications, and R-factors for each job completed. One copy of all aforementioned information shall be installed at the attic access on approved attic cards at each job address.

§ 12-273. Place of business; telephone number; signs; identification on vehicles. Every person engaged in the insulation and contracting business or operating under a license and registration as a contractor within the City shall maintain a regular place of business and shall maintain a telephone in the Oklahoma City telephone exchange or a toll free number listed with the telephone company as a business phone.
§ 12-274. Signs and license number on vehicles. All persons operating an insulation business shall display the firm name and the City registration number with the initials "O.C." preceding that number on all vehicles used in the operation of the business. The signs and license numbers shall be printed on both sides or in other conspicuous places on the vehicle in letters of not less than two inches in height.

§ 12-275. Exemption. The provisions of this article shall not apply to an owner of any building who desires to install insulation in such building.

§ 12-276. Violations. Any person who violates any provision of this article or other section of this Code, which is applicable to the insulation business, in addition to any applicable penalty, may have his licenses suspended, revoked or not renewed.

DIVISION 2. LICENSE*

(a) No person shall engage in the business of installing any poured, bat or blown insulation without a license issued by the Supervisor of Licenses.
(b) Employees of duly licensed insulation contractors shall not be required to obtain a license or pay a fee in order to engage in the work of installing insulation during the regular course of their employment.

§ 12-286. Fee. In order to obtain the license required by the provisions of this division, a person must pay to the City Treasurer the annual fee established in Chapter 60, the General Schedule of Fees.

§ 12-287. Term. A license issued pursuant to the provisions of this division shall expire
as provided in Section 26-11, unless sooner suspended or revoked.

§ 12-288. Bond.
(a) No insulation contractor's license shall be issued until the applicant shall have deposited with the City Clerk a surety bond in the sum of $5,000.00 to be known as "insulation-contractor bond." The bond shall be executed by the insulation contractor and the surety thereon shall be a corporate surety company, authorized to do business in this state.
(b) The bond shall be in the favor of the City and conditioned on the licensee faithfully and properly conducting his business in compliance with the laws and ordinances of the City relating to insulation and insulation contractors and for the payment of all fines and penalties imposed for the violation of such laws and for the protection and indemnification of the City against all damages, resulting directly or indirectly from any injury to persons or property on account of the negligence or unskilled work of the licensee.
(c) The bond shall be renewed annually and no person shall engage in the business of an insulation contractor unless the bond as provided in this section is on file with the City Clerk.

Section R102.4 Standards and references is hereby amended to read as follows:

Section R102.4 Standards and references. Where the City of Oklahoma City has adopted a specific referenced code or standard different than those listed, the adopted code shall apply.

Section R105.2 Building exception # 1 is hereby amended to read as follows:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the
floor area does not exceed 200 square feet (18.58 m²), the overall building height is 10 feet or less, and the building is not located on a permanent foundation.

Section R105.2 Building exception # 2 is hereby deleted.

Section R105.2 Building exception # 3 is hereby deleted.

Section R109.1.3 is hereby amended to read as follows

Section R109.1.3 Floodplain inspections. For construction in areas prone to flooding as established by Table R301.2(1), upon placement of the lowest floor, including basement, and prior to further vertical construction, the building official shall require submission of documentation, prepared and sealed by a registered design professional, of the elevation of the lowest floor, including basement.

Section R109.1.4 is hereby amended to read as follows

Section R109.1.4 Framing Inspection. Inspection of framing construction shall be made after the roof, all framing, firestopping, draftstopping, and bracing are in place and after the plumbing, mechanical and electrical rough installations are completed.

Section R110.3 Certificate issued is hereby amended to delete numbered requirements 7 and 8.

Sections R112.1, 112.3 through R112.4 is hereby deleted.

Section R113.4 Violation Penalty is hereby deleted.

Table R301.2 (1) is hereby amended to fill the table with the following: ground snow load -10 psf; wind speed - 90 mph; seismic design category - C; weathering - moderate; frost line depth - 18 inches; termite – yes; winter design temp. – 13°F; ice barrier underlayment required – no; flood hazards – See Chapter 16 of the Oklahoma City Municipal Code; air freezing index – 332; mean annual temp. – 60°F.

Table R302.1 is hereby amended to add the State approved language to read:
Table R302.1 Exterior Walls has been modified for minimum fire separation distance for walls and projections. Walls have been changed from 5 feet to 3 feet. Projections have been changed from greater than or equal to 2 feet to 5 feet to greater than or equal to 2 feet to 3 feet.

Section R302.1.1 is hereby added to read as follows:

Section R302.1.1. Zoning requirements. Lot line separations required by the zoning districts are not waived or altered by the provisions of this section.

Section R302.5.1 is hereby amended to add:

Openings between the garage and the residence shall be constructed to form a barrier that will resist the free passage of vapors, flame and products of combustion.

Section R311.7.4.1 is hereby amended to add the State approved language to read as follows:

Section R311.7.4.1 Riser Heights. The maximum riser height shall be 7 3/4 inches (196 mm). 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) at rough-in. Top and bottom riser may vary by 3/4 inch at final inspection, not to exceed 7 3/4 of an inch (196mm).

Section R313.1.2 is amended to modify the exception to read:

Exception: In an existing one story unit when provided with two or more exits (windows not included) conforming to Section R311.3 of this code.

Section R313.2 One- and two-family dwellings automatic fire systems. This section has been moved to Appendix R, Automatic Fire Systems of the IRC 2009 and is not adopted as a minimum standard for residential construction within the State of Oklahoma.

Section R313.2.1 Design and installation. This section has been moved to Appendix R, Automatic Fire Systems of the IRC 2009 and is not adopted as a minimum standard for residential construction within the State of Oklahoma.
Section R315.1 Carbon monoxide alarms is hereby amended to add the State adopted exception to read as follows:

**Exception:** If a residence with an attached garage has a sealed door between the residence and the garage; and no fuel burning appliances in the residence, then carbon monoxide detection is not required within the residence.

Sections R322.1 thru R322.3.6 are deleted and a new Section

R322.1 is added to read as follows:

Section R322.1 General Buildings and structures constructed in whole or in part in flood prone areas as established by The City of Oklahoma City shall comply with the provisions of Chapter 16 of the Oklahoma City Municipal Code.

Section R323.1 General is hereby modified to add the State approved language to read as follows:

Section R323.1 General. This section applies to the construction of storm shelters when constructed as separate detached buildings or when constructed as safe rooms within buildings for the purpose of providing safe refuge from storms that produce high winds, such as tornados and hurricanes. In addition to other applicable requirements in this code, storm shelters shall be constructed in accordance with one of the following: ICC/NSSA 500 or FEMA 320 or other equivalent engineered system.

Section R402.2 is hereby amended to add the State adopted exception to read as follows:

**Exception:** Interior concrete slabs on grade and enclosed garage slabs are not required to be air entrained.

Section R403.1.6 is hereby amended to add the State adopted exception to read as follows:

**Exception:** Wood sole plates of braced wall panels at building interiors on monolithic slabs may be anchored using connector(s) with a shear capacity of 2300 pounds and a tensile capacity of 800 pounds over a maximum span of 6 feet.
**Section R406.2 is hereby modified** to include an additional option for waterproofing:


**Section R506.2.3 is hereby amended** to add the State approved language to read as follows:

**Section R506.2.3 Vapor retarder.** A 6 mil (0.006 inch; 152 micrometers) polyethylene sheeting, other industry accepted vapor retarder products installed per manufacturer specifications or approved vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where no base course exists. (The remainder of this section, including exceptions, is adopted without modification.)

**Section R602.4 is hereby amended** to add the State approved language to read as follows:

**Section R602.4 Interior load-bearing walls.** Interior load-bearing walls shall be constructed, framed and fireblocked as specified for exterior walls. Table R602.3(5) shall be used to establish stud spacing of walls up to 10 feet (3048 mm) high, and Table R602.3.1 shall apply to walls over 10 feet (3048 mm) high.

**Section R602.10.6 is hereby amended** to add the State approved language to read as follows:

4. Wood sole plates of braced wall panels at building interiors on monolithic slabs may be anchored using connector(s) with a shear capacity of 2300 pounds and a tensile capacity of 800 pounds over a maximum span of 6 feet.

**Figure R703.7.2.1 and R703.7.2.2 are hereby amended to clarify** that the counter flashing shown goes under the flashing coming from behind the brick veneer not over it.

**Section R703.8 is hereby amended** to add the State approved language to read as follows:

**Section R703.8 Flashing.** Approved corrosion-resistant flashing shall be applied shingle-fashion in a manner to prevent entry
of water into the wall cavity or penetration of water to the building structural framing components. 6-mil polyethylene sheeting is an approved corrosion-resistant flashing when not exposed to UV rays. Self-adhered membranes used as flashing shall comply with AAMA 711. The flashing shall extend to the surface of the exterior wall finish. Approved corrosion-resistant flashings shall be installed at all of the following locations.
(The remainder of this section is adopted without modification.)

Section R801.3 is hereby deleted as adopted by the State Code.

Section R802.3 is hereby amended to add the State approved language to read as follows:

Section R802.3 Framing details. Rafters shall be framed to ridge board or to each other with a gusset plate as a tie. Ridge board shall be at least 1-inch (25 mm) nominal thickness and not less in depth than the cut end of the rafter. At all valleys and hips there shall be a valley or hip rafter not less than 2-inch (51 mm) nominal thickness and not less in depth than the cut end of the rafter. Hip and valley rafters shall be supported at the ridge by a brace to a bearing partition or be designed to carry and distribute the specific load at that point. Definition of brace includes: 1. a triangular configuration of framing members with a horizontal tie and rafter members, 2. king post or similar. Where the roof pitch is less than three units vertical in 12 units horizontal (25-percent slope), structural members that support rafters and ceiling joists, such as ridge beams, hips and valleys, shall be designed as beams. Exception: This exception helps address many situations where due to the design, building bracing is not achievable. This exception shall read: The use of a "Blind Valley", also known as a "Farmers Valley" or "California Valley" will be allowed. In this type of valley the main roof is framed as usual, it may or may not be sheathed, and the intersecting roof is framed on top of the main roof. The two valley plates or sleeps lie on top of the main roof rafters or sheathing and provide a nailing base for the jack rafters and ridge board of the intersecting roof.

Section R802.5.1 is hereby modified to add the State adopted exception to read as follows:
Exception: Braces may be spaced not more than 6 feet (1829 mm) on center if:

1. the purlin brace is 2-inch by 6-inch (51 mm by 153 mm)
2. Purlins shall be sized one nominal size larger than the rafter they support, and 3. unbraced length of braces shall not exceed 8 feet (2438 mm).

Section R902.1 is amended to add:

All roof coverings shall be required to be a minimum Class A, B or C.

Section N1101.9 Certificate. This section has been moved to the Appendix S of the IRC 2009 and is not adopted as a minimum standard of residential construction within the State of Oklahoma.

Section N1102.4.3 is hereby amended to add the State approved language to read as follows:

Section N1102.4.3 Fireplaces. New wood-burning fireplaces shall have outdoor combustion air.

Section N1103.1.1 is deleted as adopted by the State Code.

Section N1103.2.2 is hereby amended to add the State adopted exception to read as follows:

Exception: Visual inspection may be used instead of the rough-in test and post construction test.

Section N1103.8.3 is hereby amended to add the State approved language to read as follows:

Section N1103.8.3 Pool covers. Pools heated to more than 90 degrees Fahrenheit (32 degrees Celsius) shall have a pool cover with a minimum insulation value of R-12.

Section N1104.1 is hereby amended to add the State adopted exception to read as follows:

Exception: Can and/or recessed lights are exempt from this section of the code.
Section M1201.2.1 is hereby added to read as follows:

**Section M1201.2.1 Application.** In addition to the administrative provisions of this chapter the administrative sections of Chapter 29 of the Oklahoma City Municipal Code, shall also apply to the mechanical and gas requirements of Chapter 13 through 24.

Section M1307.3.2 is hereby added to read as follows:

**Section M1307.3.2 Appliance installation.**

1. Fuel burning mechanical equipment and appliances shall be installed in accordance with Section M1307 of this Code except that fuel burning central furnaces shall not be installed under a stairwell.

   **Exception:** This requirement shall not apply to areas under stairwells that are sprinkler protected.

2. Fuel-burning central heating units installed in a garage or other hazardous location shall be protected by enclosure in a closet and comply with Section G2407.6 (Outdoor Combustion Air) of this Code. Where approved by the code official, combustion air may be taken from a garage or other hazardous location, provided however that no portion of the lower combustion air opening shall be less than 24 inches from the floor.

   **Exception:** An appliance enclosure shall not be required where a direct-vent appliance is installed provided the appliance is protected from impact in an approved manner.

3. Gas combustion type central furnaces installed in rooms or closets with doors or openings that communicate with a garage or other hazardous location shall be installed in accordance with Section M1307.3 of this Code and the combustion air for such appliances shall be taken from an outdoor source unless otherwise approved by the code official.

Section M1308.3 is hereby added to read as follows:

**Section M1308.3 Construction equipment.** Construction equipment such as backhoes, other motorized earth moving equipment, etc., shall not travel within or over a stem wall area or
foundation perimeter after plumbing, electrical or mechanical ducts, piping, equipment or materials have been installed.

**Exception:** Construction equipment shall be permitted within said prohibited areas where such equipment does not travel over or adjacent to any duct, piping, equipment or materials subjecting them to physical damage, provided however that the code official shall be notified prior to the work and provided that the code official shall verify that no damage is done to the installation by such construction equipment.

**Section M1309 is hereby added** to read as follows:

**Section M1309.1 Construction Heat.** Construction heat shall be allowed according to the following requirements:

1. An inspection shall be made for construction heat prior to placing the heating system in operation.

2. Filter or filters shall be installed over each return air opening. Filters shall be cleaned or replaced as they become loaded with dust and debris. Air-handling units, appliances, and equipment shall not be in operation while the air filters are being changed.

3. The construction heat thermostat shall have a minimum set point of 55 degrees F.

4. Mechanical equipment and appliances shall be installed in accordance with all safety requirements and limitations of the appliance and equipment manufacturer’s installation instructions, relative to construction heat.

5. All conditioned construction areas served by the mechanical system shall be substantially enclosed. Mechanical and furnace rooms shall be separated and isolated from all construction areas. All combustion air shall be per the following listed sections of Chapter 24 of this Code (outdoor combustion air only):
   - G2407.6.1 - Outdoor Air (Two Opening Method)
   - G2407.6.2 - Outdoor Air (One Opening Method)

6. When combustible, flammable, explosive or corrosive materials in any state (solid, liquid, or gaseous) are being used in the construction process, the mechanical system
shall not be in use except where approved by the Code Official. The construction area shall be thoroughly ventilated before the mechanical system is put back into service.

7. Failure to provide adequate filtering during construction shall be grounds for requiring ductwork, mechanical equipment, and appliances to be professionally cleaned or replaced before final approval.

8. Failure to comply with the above requirements shall be grounds for ordering the immediate termination of gas service to the structure by the authority having jurisdiction.

Section M1401.4 is hereby amended to add Paragraph 2 and exceptions 1 and 2:

Section M1401.4 Exterior installation. Equipment installed outdoors shall be listed and labeled for outdoor installation. Supports and foundations shall prevent excessive vibration, settlement or movement of the equipment. Supports and foundations shall be level and conform to the manufacturer's installation instructions.
Mechanical equipment, appliances, and materials shall not be installed in structures, locations, or areas where such materials are subject to weather elements and outdoor conditions. Mechanical equipment and appliances shall not be installed in buildings during construction until the roofing installation is completed.

Exceptions
1. Mechanical equipment, appliances, and materials listed and labeled for outdoor installation and installed in accordance with the manufacturer’s installation instructions.

2. Equipment, appliances, and materials installed in buildings having a minimum 60 lb. roofing material installed in an approved manner that completely covers the roof of the structure.

Section M1411.3.1 is amended to add Items 5, 6, 7, and 8 to read as follows:
5. All condensate waste drain lines shall be carried full size from the primary drain pan outlet and piped to a sanitary sewer, storm drain, flood drain, or other approved location or receptor.

6. Drains shall have a slope of not less than 1/8-inch per foot and contain no sags.

7. Drains shall not discharge under any habitable space or on any sidewalk, walkway, street, alley, parking area, or where a nuisance, unsafe condition, or hazard may result.

8. Condensate drains shall not discharge into a plumbing vent.

Section M1501.1 is hereby amended to add Exception # 2 to read as follows:

Exceptions:
1. Whole-house ventilation-type attic fans that discharge into the attic space of dwelling units having private attics shall be permitted.

2. In one and two family construction, PVC pipe, plastic fittings, and approved glued joints conforming to ASTM D1785 SCH 40 shall be approved where installed in an approved manner, in or under a concrete slab and in accordance with the requirements of this code.

Section M1502.3 is hereby amended to add the State approved language to read as follows:

Section M1502.3 Duct termination. Exhaust ducts shall terminate on the outside of the building. Exhaust duct terminations shall be in accordance with the dryer manufacturer’s installation instructions. If the manufacturer’s instructions do not specify a termination location, the exhaust duct shall terminate not less than 3 feet (914mm) in any direction from openings into buildings. Clothes dryer exhaust duct terminations shall be equipped with a backdraft damper and shall not terminate within 3 feet (914mm) of a condensing unit. Screens shall not be installed at the duct termination.

Section M1601.1.3 is hereby added to read as follows:
Section M1601.1.3 Underground duct installation. All underground ducts shall be supported or secured in place by means of an approved method. Supports shall be of metallic construction and shall be capable of preventing duct floatation. The use of screws shall be permitted in duct joints and at fittings in accordance with the duct manufacturer’s installation instructions. Ducts shall be supported at intervals not to exceed 10 feet. Duct tape or wooden materials shall not be used to secure any portion of the air distribution system.

Section M1602.1.1 is hereby added to read as follows:

Section M1602.1.1 Required minimum area (return air ducts). The total unobstructed area of return air ducts or openings to a warm-air furnace shall be in accordance with the manufacturer’s installation instructions, but shall not be less than 2 square inches for each 1,000 Btu/h output rating of the furnace. The minimum unobstructed total area of the return air ducts or openings to a central air conditioning unit and/or heat pump shall be in accordance with the manufacturer’s installation instructions. Where it cannot be demonstrated that return air ducts have been sized using an approved duct sizing method, the total cross-sectional area of the return air duct shall not be less than 6 square inches for each 1,000 Btu/h nominal cooling output rating.

Exception: An approved engineered air distribution system design.

Section M1603 is hereby added:

M1603 SUPPLY AIR

Section M1603.1 is hereby added to read as follows:

Section M1603.1 Required minimum area (supply air ducts). The minimum unobstructed total area of supply air ducts from a warm-air furnace shall be in accordance with the manufacturer’s installation instructions, but shall not be less than 2 square inches for each 1,000 Btu/h output rating of the furnace. The minimum unobstructed total area of the supply air ducts or openings from a central air conditioning unit and/or heat pump shall be in accordance with the manufacturer’s installation instructions. Where it cannot be demonstrated that supply air ducts have been sized using an
approved duct sizing method, the total cross-sectional area of
the supply air duct shall not be less than 6 square inches for
each 1,000 Btu/h nominal cooling output rating. Dampers,
grilles or registers installed for the purpose of controlling the
supply airflow shall not be considered as obstructions.

**Exception:** An approved engineered air distribution system design.

**Section G2401.2 is hereby added** to read as follows:

**Section G2401.2 Work on consumer’s gas piping systems.**
Repairs, additions, alterations, relocations, and/or other work
on any portion of consumer gas piping systems shall only be
performed by a State licensed and City registered fuel gas,
mechanical and/or plumbing/fuel gas contractor who is duly
authorized to do gas work, and whose licenses and
registrations are current and active. A permit shall be obtained
by the contractor prior to performing such work.

**Section G2401.3 is hereby added** to read as follows:

**Section G2401.3 Gas meter moving, connecting and
disconnecting.** The moving, connecting, or disconnecting of
gas meters shall only be done by employees of, or other
persons authorized by the gas utility company.

**Section G2401.4 is hereby added** to read as follows:

**Section G2401.4 Residential gas meter location.** Gas meters shall
be located as required by the gas supplier.

**Section G2406.3 is amended** to add the State approved language to
read as follows:

**Section G2406.3 Outdoor locations.** Appliances installed in outdoor
locations shall be either listed for outdoor installation or
provided with approved protection from outdoor
environmental factors that influence the operability, durability
and safety of the appliance.

**Section G2408.2 is amended** to read as follows:

**Section G2408.2 Elevation of ignition source.** Equipment and
appliances having an ignition source shall be elevated such
that the source of ignition is not less than 18 inches (457 mm)
above the floor on which the appliance rests in hazardous locations and public garages, private garages, repair garages, motor fuel-dispensing facilities and parking garages. For the purpose of this section, rooms or spaces that are not part of the living space of dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

Section G2408.2 Elevation of ignition source, Exception is hereby deleted:

Section G2413.2.1 is hereby added to read as follows:

Section G2413.2.1 State minimum sizing standards. The Oklahoma Corporation Commission (OCC) Gas Utility Service Rules require all consumer gas service piping from the point of delivery to the building to be a minimum of 1 ¼ inch I. D. (inside diameter), or in the case of a mobile or manufactured building, a minimum of 1 inch I. D. (inside diameter). All gas service lines installed within the City shall have a minimum diameter in accordance with such rules, unless otherwise approved.

Tables G2413.4(3) and G2413.4(4) are hereby deleted as adopted by the State Code.

Section G2414.5 is hereby amended to read as follows:

Section G2414.5 Metallic tubing. Aluminum alloy or steel tubing shall be permitted to be used with gases not corrosive to such materials.

Section G2414.5.2 is hereby amended to add the State approved language to read as follows:

Section G2414.5.2 Copper piping and copper tubing. The use of copper piping and copper tubing shall be prohibited for all natural gas conveying applications unless otherwise approved by the code official. The use of copper piping or tubing for the conveyance of liquefied petroleum (LP) gas, where the installation is in accordance with the Oklahoma State LP Gas Administration rules and regulations shall not be prohibited.

Section G2414.10.4, Item # 2 is hereby amended to read as follows:
Section G2414.10.4 Metallic Fittings. Metallic fittings, including valves, strainers and filters shall comply with the following:
   2. Fittings used with brass pipe shall be brass or bronze.

Section G2415.8.1 is added to read:

Section G2415.8.1 Insulated union at building riser. All underground gas piping shall have an insulated union above ground level before the service enters the building. Where an anode bag is required, the anode lead wire shall be connected below the union.

Section G2415.10 is hereby amended to read as follows:

Section G2415.10 Minimum burial depth. Underground gas piping systems shall be installed a minimum depth of 18 inches below grade, except as provided for in Section G2415.10.1, as amended.

Section G2415.10.1 is hereby amended to read as follows:

Section G2415.10.1. Individual outside appliances. Individual gas lines to outside lights, grills, or other appliances shall be installed a minimum of 12 inches below finished grade, provided that the piping shall be constructed of rigid metallic piping materials with an approved coating, and provided that the piping is installed in locations where it will not be susceptible to physical damage.

Section G2415.11.1 is hereby added to read as follows:

Section G2415.11.1. Gas piping in same ditch with other piping. Gas piping may be installed in the same ditch with other piping such as water, sewer, electrical, or drainage piping provided the installation is approved and a minimum of six inches separation of the different piping systems is maintained. Such installations shall also be in accordance with all of the provisions of this Code, the National Electrical Code, as amended and adopted by the City and the International Plumbing Code, as amended and adopted by the City.

Section G2417.1.1 is hereby amended to read as follows:
Section G2417.1.1. Inspections. Inspections shall consist of a visual examination, during or after manufacture, fabrication, assembly, or pressure test as appropriate. All installations, repairs, replacements and modifications of natural gas piping systems, including consumer service lines not under the authority of the Department of Transportation (DOT) or the Oklahoma State Corporation Commission, and all building piping covered under the scope of this chapter shall be inspected for compliance with the requirements of this code.

Section G2417.1.2.1 is hereby added to read as follows:

Section G2417.1.2.1 Gas appliance connection and testing. Upon completing the gas connection to an appliance, all appliance connectors and fittings shall be tested for leakage. The connecting of gas appliances shall only be performed by qualified and licensed individuals. Such appliance connections shall be field-tested by the licensed installing contractor or his qualified and licensed representative with the use of a non-corrosive leak detecting fluid or method.

Section G2417.4.1 is hereby amended to read as follows:

Section G2417.4.1 Test pressure. The pressure used to test a gas piping system shall not be less than 15 psig with a 30 lb test gage, where piping of less than 2 inches in diameter is installed. Where the test pressure exceeds 125 psig, the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the piping. The test duration shall be not less than 10 minutes.

Section G2417.4.2 is hereby amended to read as follows:

Section G2417.4.2 Residential pressure test and test duration, 2 inch diameter piping and larger. Gas piping systems with piping larger than 2 inches in diameter shall require a gas pressure test with a minimum of 50 psig. The test duration shall be in accordance with Section 406.4.2 of the 2009 International Fuel Gas Code, by use of a 100 psig gage or other gage having an appropriate pressure range.

Section G2417.7 through G2417.7.4 is deleted.
Section G2417.7 through G2417.7.3 is added to add the State approved language to read as follows:

Section G2417.7 Purging requirements. The purging of piping shall be in accordance with Sections G2417.1.1 through G2417.7.3.

Section G2417.7.1 Piping systems required to be purged outdoors. The purging of piping systems shall be in accordance with the provisions of Sections G2417.1.1 through G2417.1.4 where the piping system meets either of the following:

1. The design operating gas pressure is greater than 2 psig.
2. The piping being purged contains one or more sections of pipe or tubing greater than 2 inches in nominal size and exceeding the lengths in Table G2417.7.1.1.

Section G2417.7.1.1 Removal from service. Where existing gas piping is opened, the section that is opened shall be isolated from the gas supply and the line pressure vented in accordance with Section G2417.7.1.3. Where gas piping meeting the criteria of Table G2417.7.1.1 is removed from service, the residual fuel gas in the piping shall be displaced with an inert gas.

Table G2417.7.1.1
Size and Length of Piping

<table>
<thead>
<tr>
<th>Nominal Pipe Size (inches)</th>
<th>Length of Piping (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>&gt; 50</td>
</tr>
<tr>
<td>3</td>
<td>&gt; 30</td>
</tr>
<tr>
<td>4</td>
<td>&gt; 15</td>
</tr>
<tr>
<td>6</td>
<td>&gt; 10</td>
</tr>
<tr>
<td>8 or larger</td>
<td>Any length</td>
</tr>
</tbody>
</table>

For SI units: 1 inch = 25.4mm; 1 ft. = 304.8mm

Section G2417.7.1.2 Placing in operation. Where gas piping containing air and meeting the criteria of Table G2417.7.1.1 is placed in operation, the air in the piping shall first be displaced with an inert gas. The inert gas shall then be displaced with fuel gas in accordance with Section G2417.7.1.3.
Section G2417.7.1.3 Outdoor discharge of purged gases. The open end of a piping system being pressure vented or purged shall discharge directly to an outdoor location. Purging operations shall comply with all of the following requirements:

1. The point of discharge shall be controlled with a shutoff valve.
2. The point of discharge shall be located at least 10 feet from sources of ignition, at least 10 feet from building openings and at least 25 feet from mechanical air intake openings.
3. During discharge, the open point of discharge shall be continuously attended and monitored with a combustible gas indicator that complies with Section G2417.7.1.4.
4. Purging operations introducing fuel gas shall be stopped when 90% fuel gas by volume is detected within the pipe.
5. Persons not involved in the purging operations shall be evacuated from all areas within 10 ft of the point of discharge.

Section G2417.7.1.4 Combustible gas indicator. The combustible gas indicator used during purging operations shall be listed and shall be calibrated in accordance with the manufacturer’s instructions and recommended schedule. The combustible gas indicator used for pipe discharge monitoring shall numerically display a volume scale from 0% to 100% with a resolution of not greater than 1% increments.

Section G2417.7.2 Piping systems allowed to be purged indoors or outdoors. The purging of piping systems shall be in accordance with the provisions of Section G2417.2.1 where the piping system meets both of the following:

1. The design operating gas pressure is 2 psig or less.
2. The piping being purged is constructed entirely from pipe or tubing of 2 inch nominal size or smaller, or larger size pipe or tubing with lengths shorter than specified in Table G2417.7.1.1.

Section G2417.7.2.1 Purging procedure. The piping system shall be purged in accordance with one or more of the following:

1. The piping shall be purged with fuel gas and shall discharge to the outdoors.
2. The piping shall be purged with fuel gas and shall discharge to the indoors or outdoors through an appliance
burner not located in a combustion chamber. Such burner shall be provided with a continuous source of ignition.

3. The piping shall be purged with fuel gas and shall discharge to the indoors or outdoors through a burner that has a continuous source of ignition and that is designed for such purpose.

4. The piping shall be purged with fuel gas that is discharged to the indoors or outdoors, and the point of discharge shall be monitored with a listed combustible gas detector in accordance with Section G2417.7.2.2. Purging shall be stopped when fuel gas is detected.

5. The piping shall be purged by the gas supplier in accordance with written procedures.

**Section G2417.7.2.2 Combustible gas detector.** The combustible gas detector used during purging operations shall be listed and shall be calibrated or tested in accordance with the manufacturer’s instructions and recommended schedule. The combustible gas detector used for pipe discharge monitoring shall indicate the presence of fuel gas.

**Section G2417.7.3 Purging appliances and equipment.** After the piping system has been placed in operation, appliances and equipment shall be purged before being placed into operation.

**Section G2422.1, number 1 is hereby amended** to read as follows:

**Section G2422.1.** Connecting appliances. Appliances shall be connected to the piping system by one of the following:

1. Rigid metallic gas pipe and fittings, appliance connections. Unless otherwise specified by the appliance or equipment manufacturer, central heating units and duct heaters shall be connected with rigid piping.

**Section P2501.2 is amended to read:**

**Section P2501.2 Application.** In addition to the administrative provisions of this chapter the administrative sections of Chapter 42 of the Oklahoma City Municipal Code, shall also apply to the plumbing and gas requirements of Chapter 24 through 32.
Section P2503.4 Building sewer test is hereby amended to add the State approved language to read as follows:

Section P2503.4 Building sewer test. When required by local authority having jurisdiction, the building sewer shall be tested by insertion of a test plug at the point of connection with the public sewer and filling the building sewer with water, testing with not less than 10-foot (3048 mm) head of water and be able to maintain such pressure for 15 minutes.

Section P2503.6 Shower liner test is hereby amended to add the State approved language to read as follows:

Section P2503.6 Shower liner test. Where shower floors and receptors are made water tight by the application of materials required by Section P2709.2, the completed liner installation shall be tested at plumbing final. The pipe from the shower drain shall be plugged water tight for the test. The floor and receptor area shall be filled with potable water to a depth of not less than 2 inches (51 mm) measured at the threshold. Where a threshold of at least 2 inches high does not exist, a temporary threshold shall be constructed to retain the test water in the lined floor or receptor area to a level not less than 2 inches deep measured at the threshold. The water shall be retained for a test period of not less than 15 minutes and there shall be no evidence of leakage.

Section P2503.7 Water-supply system testing is hereby amended to add the State approved language to read as follows:

Section P2503.7 Water-supply system testing. Upon completion of the water-supply system or a section of it, the system or portion completed shall be tested and proved tight under a water pressure of not less than the working pressure of the system or, for piping systems other than PVC or CPVC, by an air test of not less than 50 psi (345 kPa). This pressure shall be held for not less than 15 minutes. The water used for tests shall be obtained from a potable water source.

Section P2601.2 is hereby amended to read as follows:

Section P2601.2 Connection. Plumbing fixtures, drains and appliances used to receive or discharge liquid wastes or
sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems.

**Exception:** Bathtubs, showers, lavatories, clothes washers and laundry trays are not required to discharge to the sanitary drainage systems where those fixtures discharge to an approved gray water recycling system.

**Section P2603.2.2 is added to read:**

**Section P2603.2.2 Construction Equipment.** Construction equipment such as backhoes or bobcats, etc., shall not be permitted within a stem wall area or foundation perimeter after the plumbing system has been installed.

**Exception:** Construction equipment shall be permitted within said prohibited areas where such equipment does not travel over or adjacent to the plumbing system subjecting it to physical damage, provided however that the code official shall be notified prior to the work and shall verify that no damage is done to the installation.

**Section P2603.3.1 is hereby added** to read as follows:

**Section P2603.3 Piping under driveways.** Water service piping passing under automobile driveways shall be sleeved. The sleeve shall be a minimum of two pipe sizes greater than the size of the water service.

**Section P2603.6 is amended to read:**

**Section P2603.6 Freezing.** Water, soil and waste pipes shall not be installed outside of a building, in attic or crawl spaces, concealed in exterior walls, or in any other place subject to freezing temperature unless adequate provision is made to protect pipes from freezing by insulation or heat or both. Exterior water supply system piping shall be installed below recorded frost penetration, but not less than (2) feet [twenty-four (24) inches] below grade.

**Section P2603.6.1 is amended to add the State approved language to read as follows.**
Section P2603.6.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a minimum of 12 inches (305 mm) or as approved by the authority having jurisdiction below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 12 inches (305 mm) below grade.

Section P2704.1 General is hereby amended to add the State approved language to read as follows:

Section P2704.1 General. Slip joints shall be made with an approved elastomeric gasket and shall be installed from fixture to trap outlet. Fixtures with concealed slip-joint connections shall be provided with an access panel or utility space at least 12 inches (305 mm) in its smallest dimension or other approved arrangement so as to provide access to the slip connections for inspection and repair.

Section P2709.2 Lining required the first paragraph only is hereby amended to add the State approved language to read as follows:

Section P2709.2 Lining required Where required, the adjoining walls and floor framing enclosed on-site built-up shower receptors shall be lined with one of the materials listed in IRC 2009, Section P2709.2 Lining required. The remainder of this section is adopted without modification.

Section P2714.1 is hereby amended to read as follows:

Section P2714.1 Sink waste outlets. Sinks on which a food waste grinder is installed shall have a waste opening a minimum of 3.5 inches in diameter. Kitchen sinks shall have no less than a 2 inch diameter waste pipe and two 1.5 inch stub-outs shall be provided. A 2 inch diameter pipe shall extend to the top stub-out. If the sink is on an outside wall, the cleanout shall be to the outside of the building.

Section P2715.1 Laundry tray waste outlet is hereby amended to add the State approved language to read as follows:

Section P2715.1 Laundry tray waste outlet. Each compartment of a laundry tray shall be provided with a waste outlet not less than 1 1/2 inches (38 mm) in diameter and a strainer or crossbar to restrict the clear opening of the waste outlet.
**Section P2801.5 Required pan** is hereby amended to add the State approved language to read as follows:

**Section P2801.5 Required pan.** Where tank type water heaters or hot water storage tanks are installed in locations where leakage of the tanks or connections will cause damage, the tank or water heater shall be installed in a galvanized steel pan having a material thickness of not less than 0.0236 inch (0.6010 mm) (No 24 gage), or other pans approved for such use. Listed pans shall comply with CSA LC3.

**Section P2801.5.2 is hereby amended to add an exception** to read as follows:

**Exception.** When an existing water heater is not adjacent to an outside wall and in the opinion of the Chief Plumbing Inspector where structural conditions will not allow access to the outside of the building, or to an indirect waste, the discharge line from the temperature and pressure relief valve shall be turned down and terminate approximately six inches above the pan. The pan shall be capped and an approved water alarm shall be installed.

**Section P2801.6.1 is hereby added** to read as follows:

**Section P2801.6.1 Stands and/or platforms.** Where water heaters are required to be elevated, they shall be placed on a water-resistant stand or platform. Such stands or platforms shall be the responsibility of the installing contractor and shall be structurally appropriate for the intended load of the water heater and its contents. The plumbing inspector shall determine structural appropriateness. Testing of the structure may be required for questionable installations.

**Section P2803.1 Relief valves required** the first paragraph only is hereby amended to add the State approved language to read as follows:

**Section P2803.1 Relief valves required.** Tank type appliances and equipment used for heating water or storing hot water shall be protected utilizing the options listed in IRC 2009, Section P2803.1. The remainder of this section is adopted without modification.

**Section P2902.5.3 Lawn irrigation systems are hereby amended** to add the State approved language to read as follows:
**Section P2902.5.3 Lawn irrigation systems.** The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker or a spill resistant backflow preventer. A valve shall not be installed down-stream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

**Section P2902.5.3 is amended to add subsections P2902.5.3.1 thru P2902.5.3.5 to read as follows:**

**Section P2902.5.3.1 Contractor responsibility.** The plumbing contractor's responsibility for a lawn sprinkler or irrigation system shall start at the point of connection to the public water system and end at the backflow protection assembly valve.

**Section P2902.5.3.2 Purpose.** These guidelines are to protect potable water systems from contamination and pollution due to potable water connections to irrigation or lawn sprinkler systems.

**Section P2902.5.3.3 Installation.** Before any work on a lawn or irrigation system begins, permits shall be obtained. Before a final approval is given on the lawn or irrigation system, freeze protection shall be provided for all valves and piping exposed to the weather. Protection shall be provided in the form of an approved outdoor enclosure, heat tape and electrical outlet within 10ft. All wiring and electrical controls shall be installed in accordance with the current National Electrical Code.

**Section P2902.5.3.4 Locations.** The connection for the lawn or irrigation system and a shut-off valve may be situated in the right-of-way or in the utility easement but not closer than (2) two feet to the water meter. The approved backflow valve must be installed on private property.

**Section P2902.5.3.5 Maintenance.** All plumbing and drainage systems, both existing and new, and all parts thereof, shall be maintained in a safe and sanitary condition. All devices and safeguards required by the code shall be maintained in
working order. The owner or designated agent shall be responsible for the maintenance of the plumbing system.

Section P2903.8.6 Hose bibb bleed is hereby amended to add the State approved language to read as follows:

Section P2903.8.6 Hose bibb bleed. Where authority having jurisdiction requires a readily accessible air bleed shall be installed in hose bibb supplies at the manifold or at the hose bibb exit point.

Section P2903.9.1 Service valve is hereby amended to add the State approved language to read as follows:

Section P2903.9.1 Service valve. Each dwelling unit shall be provided with an accessible main shutoff valve near the entrance of the water service. The valve shall be of a full-open type having nominal restriction to flow. Additionally, the water service shall be valved at the curb or property line in accordance with local requirements.

Section P2903.10 Hose bibb is hereby amended to add the State approved language to read as follows:

Section P2903.10 Hose bibb. Hose bibs subject to freezing, including the "frost-proof" type, shall be equipped with an accessible valve inside the building so that they can be controlled and/or drained during cold periods.

Section P2903.10.1 is hereby added to read as follows:

Section P2903.10.1 Installation of frost-proof sillcocks. All sillcocks shall be installed so as to drain, where there is no access, sillcocks shall be installed in the following manner: A winged back ell or lop-eared ell, either male or female shall be used, secured solidly the structure with screws. If more length is needed then a nipple of proper material shall be used.

Section P2904.1 General is hereby amended to add the State approved language to read as follows:

Section P2904.1 General. Where installed, residential fire sprinkler systems, or portions thereof, shall be in accordance with NFPA 13D.
Sections P2904.1.1 through P2904.8.2 Dwelling Unit Fire

Sprinkler System Provisions and Certain Tables Stricken. Sections P2904.1.1 through Section P2904.8.2 and tables P2904.6.2(1) through P2904.6.2(9) have been stricken from the State code.

Section P2905.4 Water service pipe is hereby amended to add the State approved language to read as follows:

Section P2905.4 Water service pipe. Water service pipe shall conform to NSF 61 and shall conform to one of the standards listed in Table P2905.4. Water service pipe or tubing, installed underground and outside of the structure shall have a minimum working pressure rating of 160 pounds per square inch at 73 degrees Fahrenheit (1103 kPa at 23 degrees Celsius). Where the water pressure exceeds 160 pounds per square inch, (1103 kPa), piping material shall have a rated working pressure equal to or greater than the highest available pressure. Water service piping materials not third-party certified for water distribution shall terminate at least 30 inches outside the exterior wall. Ductile iron water service piping shall be cement mortar lined in accordance with AWWA C104.

Table P2905.4 Water service pipe. Asbestos-cement pipe has been deleted from the State code.

Section P2905.5.1 is added to read as follows:

Section P2905.5.1 Under concrete slabs. Inaccessible water distribution piping under slabs shall conform to the respective standards listed in Table P2905.5, and shall be installed with approved fittings or bends. Fittings installed under slabs shall be installed in accordance with the manufactures instructions, brazed or silver soldered.

Section P3003.2 Prohibited joints are hereby amended to add the State adopted exception to read as follows:

Exception: Saddle-type fittings may be used to connect the building sewer to a public sewer.
Section P3008.1 Sewage backflow is hereby amended to add the State approved language to read as follows:

Section P3008.1 Sewage backflow. Where the flood level rims of plumbing fixtures are below the elevation of the manhole cover of the next upstream manhole in the public sewer, the fixtures shall be protected by a backwater valve installed in the building drain, branch of the building drain or horizontal branch servicing such fixtures.

Section P3103.4 Prohibited used is hereby amended to add the State approved language to read as follows:

Section P3103.4 Prohibited used. Vent terminals shall not be used as a flag pole or to support flag poles, TV aerials, or similar items.

Chapter 34 thru Chapter 43 Electrical requirements are deleted and replaced with the following:

The installation of electrical systems, equipment and components shall be in accordance with the Oklahoma City Electrical Code as adopted by The City of Oklahoma City.

Appendix; The following appendices are specifically adopted and made a part of this code, including the listed changes:

(Appendix A thru D, F, I thru N, and P thru S are not being adopted.)

Appendix E – Is amended as follows:

Section AE101.1 is amended to delete “installed on privately owned (non-rental) lots” from the first sentence.

Section AE302.3 is amended to delete “drawn to scale on substantial paper or cloth and shall be” from the first sentence.

Section AE303.2 is hereby deleted.

Section AE304.1 Permit fees, is hereby deleted in favor of Section 12-199 of the Oklahoma City Municipal Code.
Sections AE304.2 and Section AE304.3 including the subsections are hereby deleted.

Section AE305.3 is hereby deleted.

Section AE502.1 is hereby amended to read as follows:

Section AE502.1 General. Foundation systems designed and constructed in accordance with this section may be considered as a permanent installation. Manufactured Home foundations and anchors shall be installed in accordance with the requirements of the State of Oklahoma.

Appendix G – is amended to delete AG105.2 #9 including 9.1, 9.2, and 9.3

Appendix H - as written

Appendix O - as written

A new appendix is added to read:

Appendix T - Subterranean Dwellings

AT101.1 General. Subterranean dwellings may be detached, semidetached, or attached and shall conform with the requirements of Chapters 1 thru 44 of this code, except as specifically modified by this Appendix.

AT101.2. Definitions. The phrase ”subterranean dwellings” shall mean an underground or partly underground structure having one-half or more of its height (measured from floor to ceiling) below the average level of the ground.

AT101.3 Emergency Egress. Every sleeping room and below grade level shall have at least one operable window complying with Section R310 or exterior door complying with Section R311.

Exceptions:

1. Buildings equipped throughout with a complete automatic fire suppression system in accordance with NFPA 13D.
2. Structures containing egress doors from sleeping rooms exiting through rated corridors leading directly to two remote exits, without traversing the residence.

AT101.4 Natural Light and Ventilation. Every living room or bedroom shall have an exterior glazed area of not less than 10 percent of floor area, and give direct visual access to natural light and open space. Artificial light shall be allowed as a substitute for exterior glazing in some rooms as long as the overall aggregate glazing requirement for the house is at least 10% of the floor area of the habitable rooms combined. Mechanical ventilation may be allowed in lieu of natural ventilation.

AT101.5 Roof Guard Rails. A fence or barrier complying with Section R312 shall be provided at the edge of the vertical drop of more than 30” or a similar physical barrier away from the edge, preventing access to the roof area.

AT101.6 Structural Design. An Oklahoma registered; structural engineer’s seal and structural analysis shall be placed on the drawing to ensure life safety for the occupants.

AT101.7 Waterproofing. In addition to the requirement of Sections R405 and R406 of this code, waterproofing shall be added to cover the roof if underground and a drainage system shall be provided below the base of all walls below grade.