

ORDINANCE NO. 777

AN ORDINANCE OF THE CITY OF CHOCTAW, OKLAHOMA, AMENDING PART 5, BY ADDING, REMOVING, RELOCATING AND RENUMBERING MULTIPLE SECTIONS TO THE CHOCTAW CODE OF ORDINANCES OF THE CITY OF CHOCTAW, OKLAHOMA, PERTAINING TO BUILDING REGULATIONS AND CODES; DECLARING REPEALER; PROVIDING FOR SEVERABILITY; AND DECLARING AN EMERGENCY.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHOCTAW, OKLAHOMA:

SECTION 1. That the Code of Ordinances of the City of Choctaw at Part 5, Sections 5-101; through 5-1802 are hereby amended and reads as follows:

PART 5

BUILDING REGULATIONS AND CODES

CHAPTER 1

GENERAL

- § 5-101 Building official.
- § 5-102 Fire limits defined.
- § 5-103 Building permit required; fee.
- § 5-104 Certificate of Occupancy
- § 5-105 Plan review process for non-residential and multi-family buildings.
- § 5-106 Permit fees for water and sewage development.
- § 5-107 Liability.
- § 5-108 Right of entry.
- § 5-109 House numbering required.

CHAPTER 2

INTERNATIONAL BUILDING CODE

- § 5-201 Adoption of the international building code.
- § 5-202 Additions, insertions and changes to the international building code.

CHAPTER 3

INTERNATIONAL FIRE CODE

- § 5-301 Adoption of the International Fire Code
- § 5-302 Additions, insertions and changes to the International Fire Code

CHAPTER 4

INTERNATIONAL MECHANICAL CODE

- § 5-401 Adoption of the international mechanical code.
- § 5-402 Additions, insertions and changes to the international mechanical code.
- § 5-403 Mechanical; registration, permits and fees.
- § 5-404 Mechanical; permits and inspections.

CHAPTER 5

NATIONAL ELECTRICAL CODE

- § 5-501 Adoption of the national electrical code
- § 5-502 Additions, insertions and changes to the national electrical code
- § 5-503 Permit required for electrical installations; issuance.
- § 5-504 Inspection fee.
- § 5-505 Electricians' registration required, bond.

CHAPTER 6

INTERNATIONAL PLUMBING CODE

- § 5-601 Adoption of the international plumbing code.
- § 5-602 Additions, insertions and changes to the international plumbing code.
- § 5-603 Plumbers; registration, permits and fees.

CHAPTER 7

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- § 5-701 Adoption of the International Fuel Gas Code
- § 5-702 Additions, insertions and changes to the International Fuel Gas Code

CHAPTER 8

{RESERVED}

CHAPTER 9

{RESERVED}

CHAPTER 10

WATER WELL DRILLING AND OPERATION

- § 5-1001 Water well drilling prohibited unless pursuant to this chapter.
- § 5-1002 Permit required.
- § 5-1003 State water well drilling license required.
- § 5-1004 Location and depth.
- § 5-1005 Purpose, no connection to city water system.
- § 5-1006 Pollution of groundwater prohibited.
- § 5-1007 Inspection.
- § 5-1008 Cease and desist orders.
- § 5-1009 State requirements, mud and erosion control.
- § 5-1010 Sealing and capping.
- § 5-1011 Industrial water well prohibited.
- § 5-1012 Penalty

CHAPTER 11

INTERNATIONAL RESIDENTIAL CODE

- § 5-1101 Adoption of the international residential code.
- § 5-1102 Additions, insertions and changes to the international residential code
- § 5-1103 Registration, permits and fees.

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INTERNATIONAL EXISTING BUILDING CODE

- § 5-1201 Adoption of the international building code.
- § 5-1202 Additions, insertions and changes to the international building code.

CHAPTER 13

INTERNATIONAL PROPERTY MAINTENANCE CODE

- § 5-1301 Adoption of the international maintenance code.
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CHAPTER 14

{RESERVED}

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- § 5-1501 Definitions.
- § 5-1502 Application and permit.
- § 5-1503 Fee.
- § 5-1504 Time to be specified on permit.
- § 5-1505 Approval by police chief, manager, routes.
- § 5-1506 Pneumatic tires.
- § 5-1507 Move to be accomplished diligently.
- § 5-1508 Warnings and attendants.
- § 5-1509 Penalties.

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{RESERVED}

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CHAPTER 18

PENALTY

- § 5-1801 Penalty.
- § 5-1802 Relief in courts.

AMENDMENTS

- § A-1 {Reserved}
- § A-2 International Building Code (IBC), 2015 Edition
- § A-3 International Fire Code (IFC), 2015 Edition
- § A-4 International Mechanical Code (IMC), 2015 Edition
- § A-5 National Electrical Code (NEC), 2014 Edition
- § A-6 International Plumbing Code (IPC), 2015 Edition
- § A-7 International Fuel Gas Code (IFGC), 2015 Edition
- § A-8 {Reserved}
- § A-9 {Reserved}

§ A-10 {Reserved}

§ A-11 International Residential Code (IRC), 2015 Edition

§ A-12 International Existing Building Code (IEBC), 2015 Edition

§ A-13 International Property Maintenance Code (IPMC), 2015 Edition

CHAPTER 1

GENERAL

- § 5-101 Building official.
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- § 5-107 Liability.
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- § 5-109 House numbering required.

§ 5-101 BUILDING OFFICIAL

The building official of this city shall be appointed by the city manager and shall have the powers and duties prescribed for the “building official” by the city’s building code; provided that his/her powers and duties may be exercised by his/her authorized representatives under his/her supervision and control. The term “inspector”, whenever used in the ordinances of the city, means the building official, unless a separate electrical inspector, plumbing inspector, and/or gas inspector is appointed by the city manager.

§ 5-101 FIRE LIMITS DEFINED.

The fire limits are the defined City Limits boundary that has been established and annexed by the local government body for the City and Town of Choctaw.

§ 5-103 BUILDING PERMIT REQUIRED, FEE.

- A. No person shall build upon his/her premises, or allow to be built, or have built upon his/her premises any building or other structure, unless a building permit has been obtained as required by this code. Any person desiring to erect, or have erected, or move, any structure upon his premises shall make written application for a permit to do so with the Building Official of the city.
- B. A person desiring a building permit shall submit an application therefor to the building official. The applicant shall submit with the application such reasonable information as

the Building Official may require to enable him/her to determine whether granting the permit would be in accordance with the requirements of the ordinances of the city.

- C. If the application is in accordance with the requirements of the ordinances and laws, and if the site and plans of the building to be built or moved is approved by the building official, the building official issue the permit upon the payment by the applicant of a building permit fee which may be set by motion or resolution of the city council. A current copy of the fee schedule shall be kept in the office of the city clerk.
- D. Any permit issued hereunder shall be valid for six (6) months from date of issuance. Any permit may, for good cause shown, be extended for an additional six (6) months. Application for such extension shall be made to the building official. If the building official determines there is good cause to extend the permit, the building official shall issue the extension. (Ord. No. 101, 11/19/73; Ord. No. 122, 12/2/75; Ord. No. 261, 1/16/85)

§ 5-104 CERTIFICATE OF OCCUPANCY

- A. **New Building or Structure.** With the exception of residential uses, no change shall be made in the use of any land or building or structure or tenancy after the passage of this ordinance until a certificate of occupancy is obtained from the building inspector certifying that all the provisions of this ordinance are met.
 - 1. Whenever a building permit is issued for the erection of a new building or structure, an occupancy permit shall be required prior to occupancy.
 - 2. Temporary certificates of occupancy for change in use of any land or building or structure or tenancy or for new building or structure may be approved at the discretion of the building official but at no time shall a temporary certificate of occupancy be approved if any life, safety or health requirements do not meet the ordinances of the city as determined by the building official.
 - 3. The fee for all commercial or industrial certificate of occupancy, for a new building or a change in occupancy or tenancy is set by the city.
- B. **Certificate of Occupancy: Existing Building or Structure.** Following a vacancy of an existing building or structure, no habitation shall be re-occupied until a certificate of occupancy has been obtained from the City of Choctaw with the approval of the appointed officer.
 - 1. Whenever a zoning clearance permit is applied for, for an existing building with a change in tenancy, a certificate of occupancy shall be required prior to occupancy.

2. Temporary certificate of occupancy for change in use of any land, building, structure or tenancy, may be approved at the discretion of the building official, but at no time shall a temporary certificate of occupancy be approved if any life, safety or health requirements do not meet the ordinances of the city as determined by the building official.
3. The fee for all commercial or industrial re-occupancy/certificate of occupancy, for an existing building with a change in tenancy is set by the city.

§ 5-105 **PLAN REVIEW PROCESS FOR NON-RESIDENTIAL AND MULTI-FAMILY BUILDINGS.**

- A. Any person, corporation, group of persons or other entity desiring to construct, build, develop or cause to be constructed, developed or built any multi-family, commercial, retail, industrial facility, or non-residential structure, building or any other improvement other than construction which is totally confined to the interior of any existing building or structure must first submit to the Development Service Department a plan of such improvements, designs, detail, or any other additional documentation.
- B. All plans submitted must be drawn to scale and show all improvements to be made. It is the responsibility of the city staff to require plans submitted to be in such detail as to show the effect of any improvements to be constructed on the public health, safety and welfare.
- C. There is hereby created within the office of the city manager a site plan review committee which shall consist of each of the following:
 1. The development director or designee
 2. The public works director or-designee;
 3. The fire chief or designee;
 4. The police chief or designee;
 5. The city manager;
 6. The city manager may from time to time request other city employees or interested parties as he/she deems appropriate to attend in a non-voting capacity.
- D. The powers and duties of the site plan review committee shall be enumerated herein:
 1. To meet and review all applications placed before the committee;

2. To approve or disapprove the construction or improvement of all multi-family, commercial, retail, industrial or non-residential structures, buildings or other facilities within the corporate limits of the city;
 3. To review and enforce adopted regulations for the organization of the committee and for conduct of committee business; and
- E. Before the committee shall approve any application the committee shall also determine by roll call vote and recorded by the City Clerk that the application is in conformance with the City of Choctaw Comprehensive Master Plan and the adopted requirements of code, by the City of Choctaw, State of Oklahoma, and the U.S. federal government.
- F. Any applicant aggrieved by any decision of the committee may appeal such decision to the city council, upon payment of a fee as set by the city council. The council shall hold a public hearing and make a determination as to the propriety of the committee decision.
- G. Any person, firm or corporation who violates or refuses to comply with any of the provisions of this chapter shall be punished as provided in § 1-108 of this code. (Ord No. 276, 6/4/85)

§ 5-106 PERMIT FEES FOR WATER AND SEWAGE DEVELOPMENT.

- A. The following definitions shall apply for the purpose of assessing permit fees and includes any residential property zoned in any single-family or multi-family residential classification in the city zoning ordinance or any other zoning classification allowing residential use, and shall include mobile home parks and each site therein, and any planned unit development containing residentially zoned property, including any portion of such planned unit development appurtenant to the residentially zoned portion such as common areas.
- B. Water and sewage development fees are required as follows:
1. The developer of platted and unplatted land, hereinafter referred to as "developer", shall pay to the city clerk a water system and sewage system development fee as set by the council as a minimum fee for each residential unit and per square foot for all other areas, less any credits allowable by this chapter prior to the building official issuing the building permit. Excluded from the operation of this paragraph is not required by ordinance or regulation or where such site is previously platted and has water and sewer available;
 2. The actual costs of such water system within the boundaries of the platted or unplatted area, including necessary engineering, design, construction, labor and material costs incurred to supply water within the area, shall be paid by the developer and shall not be reimbursed by the city;

3. The actual costs of such water and sewage system outside the boundaries of the platted or unplatted area in question and the additional costs for such improvements within the boundaries of the area which are required by the city, in addition to those improvements otherwise required by any other rule, regulation or ordinance, including necessary construction, labor and material costs, plus ten percent (10%) of the accepted bid for engineering and surveying shall be paid by the developer with a credit of the costs being made against the water system and sewage system development fee. Such allowable credit against the development fee shall not exceed the amount of the development fee set above in Paragraph 1 of this Subsection B.
4. The fees provided for in Paragraph 1 of this Subsection B shall be deposited into the Subdivision Capital Improvement Fund. Such fees will be budgeted and appropriated for the purposes of expanding and upgrading the water and sewage systems of the city, as capital improvements to such utility systems only;
5. In the event a developer submits to the city a development sketch plan or plot plan of phased development, or development of separate but related properties, any credits provided for by Paragraph 3 of this subsection shall accumulate and be available to the developer for such phased development or later related development, if such development, sketch plan or plot plan containing such plans are presented to the city council prior to any construction of any of such improvements, and approved by the city council. Such presentation of plans for the phased development or separate but related development, and any approval thereof by the city council, shall not be deemed approval of any sketch plan, plot plan or building permits, as required by rule, regulation or ordinance, but shall only relate to the accumulation and carry forward of credits acquired under Paragraph 3 of this subsection; (Ord. No. 261, 1/15/85)

Cross Reference: See also platting fees, water/sewer fee, § 19-145 of this code.

§ 5-107 LIABILITY.

Any officer, employee, or members of the governing body for the City of Choctaw or Choctaw Utilities Authority, charged with the enforcement of this code, acting for the city in the discharge of his/her duties, shall not thereby render himself/herself liable personally, and he/she is hereby relieved from all personal liability for any damage that may accrue to persons or property as a result of any act required or permitted in the discharge of his/her duties. Any suit brought against any officer or employee because of such act performed by him/her in the enforcement of any provision of this code shall be defended by the department of law until the final termination of the proceedings. (Prior Code, § 4-8)

§ 5-108 RIGHT OF ENTRY.

The building official, in the discharge of his official duties, and upon proper identification, shall have authority to enter any building, structure or premises, if a permit is active and at any reasonable hour. (Prior Code, § 4-9)

§ 5-109 HOUSE NUMBERING REQUIRED.

- A. All lots, buildings and structures in the city shall be numbered in accordance with the following plan:
 - 1. North and South numbers shall commence at Reno Street;
 - 2. East numbers shall commence at Santa Fe Avenue in Oklahoma City, OK;
 - 3. Odd numbers shall be on the west and north sides of the streets;
 - 4. Even numbers shall be on the south and east sides of the streets; and
 - 5. There shall be one hundred (100) numbers to each block.
- B. The Regional 9-1-1 Manager shall keep a chart showing the proper street number of every lot in the city, after they have been approved by the development service director or designee for public inspection.
- C. In those areas where lot numbers have been approved by the Regional 9-1-1 Manager, it shall be the duty of the owners and occupants of every house in the city to have placed thereon, in a place visible from the street, figures at least four (4) inches high for one to two family residence and six (6) inches high for all other structures, showing the number of the structure. The display sign shall be placed in one or multiple locations such as the mailbox, curb or a minimum of six feet (6') from the building foundation on the structure's property site. (Ord. No. 344, 4/21/87)
- D. In areas such as multi-family and non-residential structures on a single plot of land with multiple structures, shall identify the assigned building identification number. The text shall be a minimum of twelve inches (12") in height. The display text shall contrast with the background. The placement of the sign shall be posted with the highest top plat of the structure and facing to the main entrance of the site.
- E. Apartments, suites, room numbers or any other individual room of a structure shall have a minimum of two inch (2") tall text. The text display shall contrast with the back ground and the display shall be placed on the room door, above the door, or on the right hand side, but the display can't be further away than twelve inches (12") from the outside edge of a door entry. The assigned rooms shall have a minimum of three (3) digits or four (4)

digits if applicable. The first digit shall identify the assigned building number, if applicable the structure has multiple stories the second digit shall identify the floor number, and the last two digits shall be the unique number for said room. The numbering of the rooms shall be assigned in accordance with the structure plan identified in Section 5-108 (A). If there is a unique layout or a safety issue could arise, the building official and fire chief shall adjust room numbers as they see fit.

- F. Hall way reference signage shall display the room number range down each hall way. The room reference signage shall be a minimum of four inch (4") text and shall be displayed at the entrance of a hall way, elevator, and emergency stairways.

CHAPTER 2

INTERNATIONAL BUILDING CODE

§ 5-201 Adoption of the international building code.

§ 5-202 Additions, insertions and changes to the international building code.

§ 5-201 ADOPTION OF THE INTERNATIONAL BUILDING CODE.

That certain documents, three (3) copies of which are on file in the office of the City Clerk and the City of Choctaw, being marked and designated as *International Building Code*, 2015 edition, as published by the International Code Council, Inc., be and is hereby adopted as the Building Code of the City of Choctaw, in the State of Oklahoma for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of building construction in the City of Choctaw and governing the conditions and maintenance of all property, buildings and structures, by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures as herein provided; providing the issuance of permits and collection of fees therefore, and each and all of the regulations, provisions, penalties, conditions and terms of such International Building Code on file in the office of the City of Choctaw, , and any revisions or amendments thereto, published by the International Code Council, which are on file in the office of the City Clerk are hereby referred to, adopted and made a part hereof as if fully set out in this Ordinance, with the additions, insertions, deletions and changes, prescribed in Amendment A-2 of this ordinance. (Ord. No. 270, 5/28/85; Ord. No. 555, 7/2/02)

§ 5-202 ADDITIONS, INSERTIONS AND CHANGES TO THE INTERNATIONAL BUILDING CODE.

Any additions, insertions and changes to the International Building Code, 2015 edition is shown in Amendment A-2 of Part 5 Building Regulations and Codes.

CHAPTER 3

INTERNATIONAL FIRE CODE

- § 5-301 Adoption of the International Fire Code
- § 5-302 Additions, insertions and changes to the International Fire Code

§ 5-301 ADOPTION OF THE INTERNATIONAL FIRE CODE

That certain documents, three (3) copies of which are on file in the office of the City Clerk and the City of Choctaw, being marked and designated as *International Fire Code*, 2015 edition, as published by the International Code Council, Inc., be and is hereby adopted as the Fire Code of the City of Choctaw, in the State of Oklahoma regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees therefor, and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code on file in the office of the City of Choctaw are hereby referred to adopted, and made a part hereof, as if fully set out in the legislation, with the additions, insertions, deletions and changes, if any prescribed in Amendment A-3 of this ordinance.

§ 5-302 ADDITIONS, INSERTIONS AND CHANGES TO THE INTERNATIONAL FIRE CODE

Any additions, insertions and changes to the International Fire Code, 2015 edition is shown in Amendment A-3 of the Building Regulations and Codes.

CHAPTER 4

INTERNATIONAL MECHANICAL CODE

- § 5-401 Adoption of the international mechanical code.
- § 5-402 Additions, insertions and changes to the international mechanical code.
- § 5-403 Mechanical; registration, permits and fees.
- § 5-404 Mechanical; permits and inspections.

§ 5-401 ADOPTION OF THE INTERNATIONAL MECHANICAL CODE

That certain documents, three (3) copies of which are on file in the office of the City Clerk and the City of Choctaw, being marked and designated as *International Mechanical Code*, 2015 Edition as published by the International Code Council, Inc., be and is hereby adopted as the Mechanical Code of the City of Choctaw for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of mechanical systems in the City of Choctaw and providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said International Mechanical Code on file and any revisions or amendments thereto, which are on file in the office of the City Clerk are hereby referred to, adopted and made a part hereof as if fully set out in the legislation, with the additions, insertions, deletions and changes, if any prescribed in Amendment A-4 of this ordinance. (Ord. No. 458, 11/1/94; Ord. No. 554, 7/2/02)

§ 5-402 ADDITIONS, INSERTIONS AND CHANGES TO THE INTERNATIONAL MECHANICAL CODE.

Any additions, insertions and changes to the International Mechanical Code, 2015 edition is shown in Amendment A-4 of the Building Regulations and Codes.

§ 5-403 MECHANICAL; REGISTRATION, PERMITS AND FEES.

- A. The phrases and words “journeyman, “ “apprentice, “ and “contractor, “when used in the ordinances, regulations and other official acts and communications of this city, shall have the meanings respectively prescribed for them by §§ 1850.1 et seq. of Title 59 of the Oklahoma Statutes, the state Mechanical License Act unless the context clearly indicates a different meaning.
- B. It is unlawful for any person to engage in the business, trade, or occupation of a mechanical contractor, or of a journeyman, or of an apprentice, in this city unless he/she is registered with the city and has a current and valid certificate issued by the city.
- C. Only persons who have current and valid licenses as mechanical contractors, ~~or as~~ journeyman or as apprentice issued by the Construction Industries Board as provided by the state’s Mechanical Licensing Act may register as such with the city.
- D. Applicants for certificates of registration, after complying with the laws of the state and with the city code, and after payment of the fee hereinafter specified, shall be registered by the city. The registration shall expire at the end of the fiscal year, but may be renewed from year to year. Mechanical contractors desiring to renew their registration shall furnish the same evidence of compliance with state licensing laws and the same bond is required as set forth by city code. An applicant for mechanical contractor’s registration shall also furnish bond in such sum and such conditions as set by the city council.

- E. A qualified person may re-register as a mechanical contractor, a journeyman or an apprentice, in the same manner as in the original instance, and upon the same conditions.
- F. All mechanical contractors' registrations not renewed within thirty (30) days after the date of expiration thereof shall be canceled, and a new application for registration must be made and the fee for a new registration paid.
- G. The fee for registration shall be as set by the city council by motion or resolution.
- H. The city council, upon at least ten (10) days' notice and adequate opportunity for a public hearing, may revoke the city registration of any mechanical contractor or journeyman or apprentice for violating any provisions of the ordinances or regulations of the city relating to the installation of mechanical systems or for any other cause specified in the state Mechanical Licensing Act.
- I. Every person receiving a certificate as a mechanical contractor shall file with the city a bond in such sum as set by the city, executed with a surety company authorized to do business in the state. The bond shall be conditioned that the principal will install all mechanical work, fixtures, appliances and equipment in accordance with the law and this code, ordinances and other regulations of the city relating to heat and air systems, and in a workmanlike manner; that the principal shall, without further cost to the person for whom the work was done, remedy any defective or faulty work caused by poor workmanship or inferior or non-standard material; and that the city may be fully indemnified and held harmless from any and all costs, expenses or damage resulting from the performance of his work as a mechanical contractor or journeyman as the case may be. (Ord. No. 616, 1/10/06)

§ 5-404 MECHANICAL; PERMITS AND INSPECTIONS.

- A. No mechanical work shall be undertaken without a permit from the city.
- B. The application for such work must follow the adopted city code.
- C. The schedule of permit fees may be set forth by resolution or motion of the city council. Such payment will be made upon application.
- D. Inspection of such work must conform to the guidelines set forth in the city code. (Ord. No. 616, 1/10/06)

State Law Reference: Mechanical Licensing Act, 59 O.S.

NATIONAL ELECTRICAL CODE

- § 5-501 Adoption of the national electrical code
- § 5-502 Additions, insertions and changes to the national electrical code
- § 5-503 Permit required for electrical installations; issuance.
- § 5-504 Inspection fee.
- § 5-505 Electricians' registration required, bond.

§ 5-501 ADOPTION OF THE NATIONAL ELECTRICAL CODE

That certain documents, three (3) copies of which are on file in the office of the City Clerk and the City of Choctaw, being marked and designated as *National Electric Code*, 2014 Edition, as published by the National Fire Protection Association be and is hereby adopted as the Electric Code of the City of Choctaw, in the State of Oklahoma for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of electrical systems in the City of Choctaw and providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Electrical Code on file, and any revisions or amendments thereto, which are on file in the office of the City Clerk are hereby referred to, adopted and made a part hereof as if fully set out in the legislation, with the additions, insertions, deletions and changes, if any prescribed in Amendment A-5 of this ordinance.

§ 5-502 ADDITIONS, INSERTIONS AND CHANGES TO THE NATIONAL ELECTRICAL CODE.

Any additions, insertions and changes to the National Electrical Code, 2014 edition is shown in Amendment A-5 of the Building Regulations and Codes.

§ 5-503 PERMIT REQUIRED FOR ELECTRICAL INSTALLATIONS; ISSUANCE.

- A. It is unlawful for any person to install any electrical wiring, fixtures, or apparatus in or on any building or structure in the corporate limits of this city or make extensions to any existing electrical installations without first securing a permit from the city clerk.
- B. Applications for electrical permits shall be made with the City of Choctaw; and the applicant shall provide such plans, specifications, and other data as may be reasonably required by the City of Choctaw or by the adopted NEC Code.
- C. The fee for an electrical permit shall be as prescribed by motion or resolution passed by the city council.

§ 5-504 INSPECTION FEE.

The city council by motion or resolution may prescribe an inspection fee to be paid to the city when electrical installations are inspected by the electrical inspector.

§ 5-505 ELECTRICIANS' REGISTRATION REQUIRED, BOND.

- A. It is unlawful for any person to engage in the business, trade or vocation of electrical contractor, journeyman electrician or apprentice electrician without a certificate of registration as such secured from the city. The initial fee for a registration certificate, and any renewal, to be paid to the City of Choctaw, shall be as set by the city council. A registration certificate must be renewed within thirty (30) ~~(90)~~ days following expiration of the certificate. After the expiration, an application for a new certificate must be requested and the initial fee paid again. No person may be registered with the city as contractor, journeyman or apprentice unless he/she possesses a valid and current state license issued by the state and pays the registration fee in such sum as set by the city council by motion or resolution. This certificate is not transferrable to any other individual or company.

- B. Every person receiving a certificate as an electrical contractor shall file with the City of Choctaw a bond in such sum as set by the city, executed with a surety company authorized to do business in the state. The bond shall be conditioned that the principal will install all electrical wiring, fixtures, appliances, and equipment in accordance with the law and the ordinances and other regulations of the city relating to electrical installations and in a workmanlike manner; that the principal shall, without further cost to the person for whom the work was done, remedy and defective or faulty work caused by poor workmanship or inferior or non-standard material; and that the city may be fully indemnified and held harmless from any and all costs, expenses or damage resulting from the performance of his work as an electrical contractor or electrician, as the case may be.

- C. For the installing of bell, telephone or signal systems not using over twelve (12) volts, no registration or bond will be required. The installation of same must comply with all other requirements of the ordinances of the city.

- D. After adequate opportunity for a hearing, the city council may revoke the certificate of an electrical contractor, an apprentice electrician, or a journeyman electrician. (Prior Code, § 4-23, in part)

CHAPTER 6

INTERNATIONAL PLUMBING CODE

- § 5-601 Adoption of the international plumbing code.
- § 5-602 Additions, insertions and changes to the international plumbing code.
- § 5-603 Plumbers; registration, permits and fees.

§ 5-601 ADOPTION OF THE INTERNATIONAL PLUMBING CODE.

That certain documents, three (3) copies of which are on file in the office of the City Clerk and the City of Choctaw, being marked and designated as *International Plumbing Code, 2015 Edition*, as published by the International Code Council and is hereby adopted as the Plumbing Code of the City of Choctaw, in the State of Oklahoma for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance plumbing systems in the City of Choctaw and providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Plumbing Code on file and any revisions or amendments thereto, which are on file in the office of the City Clerk are hereby referred to, adopted and made a part hereof as if fully set out in this Ordinance.

§ 5-602 ADDITIONS, INSERTIONS AND CHANGES TO THE INTERNATIONAL PLUMBING CODE.

Any additions, insertions and changes to the International Plumbing Code, 2015 edition is shown in Amendment A-6 of the Building Regulations and Codes.

§ 5-603 PLUMBERS; REGISTRATION, PERMITS AND FEES.

- A. The phrases and words “journeyman plumber, “plumber’s apprentice, “plumbing contractor, “ and “plumbing, “ when used in the ordinances, regulations and other official acts and communications of this city, shall have the meanings respectively prescribed for them by Chapter 27 of Title 59 of the Oklahoma Statutes, the state plumbing license law unless the context clearly indicates a different meaning.
- B. It is unlawful for any person to engage in the business, trade, or occupation of a plumbing contractor (otherwise known as a master plumber), or of a journeyman plumber, or of a plumber’s apprentice, in this city unless he/she is registered with the city and has a current and valid certificate of registration issued by the city.
- C. Only persons who have current and valid licenses as plumbing contractors, journeyman plumbers, or apprentice plumbers issued by the State of Oklahoma as provided by the state plumbing license law may register as such with the city.
- D. Applicants for certificates of registration, after complying with the laws of the state and with the city code, and after payment of the fee hereinafter specified, shall be registered by the City of Choctaw. The registration shall expire at the end of the fiscal year, but may be renewed from year to year. Plumbing contractors desiring to renew their registration shall furnish the same evidence of compliance with state licensing laws and the same bond is required as set forth by city code. An applicant for plumbing contractor’s

registration shall also furnish bond in such sum and such conditions as set by the city council.

- E. A qualified person may re-register as a plumbing contractor, a journeyman plumber or a plumber's apprentice, in the same manner as in the original instance, and upon the same conditions.
- F. All plumbing contractors registrations not renewed within thirty (30) days after the date of expiration thereof shall be cancelled, and a new application for registration must be made and the fee for a new registration paid.
- G. The fee for registration shall be as set by the city council by motion or resolution.
- H. The city council, upon at least ten (10) days' notice and adequate opportunity for a public hearing, may revoke the city registration of any plumbing contractor, ~~or~~ journeyman, or apprentice plumber for violating any provisions of the ordinances or regulations of the city relating to the installation of plumbing or for any other cause specified in the state plumbing license law.
- I. Every person receiving a certificate as a plumbing contractor shall file with the City of Choctaw a bond in such sum as set by the city, executed with a surety company authorized to do business in the state. The bond shall be conditioned that the principal will install all plumbing work, fixtures, appliances and equipment in accordance with law and this code, ordinances and other registrations of the city relating to plumbing, and in a workmanlike manner; that the principal shall, without further cost to the person for whom the work was done, remedy any defective or faulty work caused by poor workmanship or inferior or non-standard material; and that the city may be fully indemnified and held harmless from any and all costs, expenses or damage resulting from the performance of his work as a contractor or plumber as the case may be.

State Law Reference: State plumbing licenses, requirements, 59 O.S. Chapter 27

CHAPTER 7

INTERNATIONAL FUEL GAS CODE

- § 5-701 Adoption of the International Fuel Gas Code
- § 5-702 Additions, insertions and changes to the International Fuel Gas Code
- § 5-701 ADOPTION OF THE INTERNATIONAL FUEL GAS CODE.

That certain documents, three (3) copies of which are on file in the office of the City Clerk and the City of Choctaw, being marked and designated as *International Fuel Gas Code, 2015*

Edition, as published by the International Code Council and is hereby adopted as the Plumbing Code of the City of Choctaw, in the State of Oklahoma for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of a fuel gas systems in the City of Choctaw and providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Fuel Gas Code on file and any revisions or amendments thereto, which are on file in the office of the City Clerk are hereby referred to, adopted and made a part hereof as if fully set out in this Ordinance.

§ 5-702 ADDITIONS, INSERTIONS AND CHANGES TO THE INTERNATIONAL FUEL GAS CODE.

Any additions, insertions and changes to the International Fuel Gas Code, 2015 edition is shown in Amendment A-7 of the Building Regulations and Codes.

CHAPTER 8

{RESERVED}

CHAPTER 9

{RESERVED}

CHAPTER 10

WATER WELL DRILLING AND OPERATION

- § 5-1001 Water well drilling prohibited unless pursuant to this chapter.
- § 5-1002 Permit required.
- § 5-1003 State water well drilling license required.
- § 5-1004 Location and depth.
- § 5-1005 Purpose, no connection to city water system.
- § 5-1006 Pollution of groundwater prohibited.
- § 5-1007 Inspection.
- § 5-1008 Cease and desist orders.
- § 5-1009 State requirements, mud and erosion control.
- § 5-1010 Sealing and capping.
- § 5-1011 Industrial water well prohibited.
- § 5-1012 Penalty.

§ 5-1001 WATER WELL DRILLING PROHIBITED UNLESS PURSUANT TO THIS CHAPTER.

No person, firm or corporation shall drill or cause to be drilled within the city any domestic or commercial water well or make use of the water produced from any such well without first having complied with the provisions hereinafter set forth in this chapter. (Ord. No. 459, 11/1/94)

§ 5-1002 PERMIT REQUIRED.

No domestic or commercial water well shall be drilled without a permit therefore having been obtained from the city manager or his designee. Applications for such permit shall be made on forms supplied or approved by the city manager or his/her designee. Such applications shall, among other things, show the address and legal description of the property on which the proposed well is to be drilled, the location of the well on such property, the name and address of the owner of the property on which the well is to be located, and the name and address of the well driller. The applicant for such permit shall be required to pay a permit and inspection fee as set by motion or resolution by the city council. (Ord. No. 459, 11/1/94)

§ 5-1003 WATER WELL DRILLING LICENSE REQUIRED.

- A. Water wells may be drilled only by drillers who hold a valid water well drillers license issued by the Oklahoma Water Resources Board and the City of Choctaw. Within ten (10) days after the completion of any work on a water well, the well driller shall provide the city with a well log and all other information and data required to be furnished by water well drillers under the current rules and regulations promulgated by the Oklahoma Water Resources Board which are hereby adopted by reference. (Ord. No. 459, 11/1/94)
- B. It is unlawful for any person to engage in the water well drilling in this city unless registered with the city and has a current and valid certificate issued by the city and the state.
- C. Applicants for certificates of registration, after complying with the laws of the state and with the city code, and after payment of the fee hereinafter specified, shall be registered by the City of Choctaw. The registration shall expire at the end of the fiscal year, but may be renewed from year to year. Water Well Driller's desiring to renew their registration shall furnish the same evidence of compliance with state licensing laws and the same bond is required as set forth by State of Oklahoma. An applicant for water well drillers registration shall also furnish bond in such sum and such conditions as set by the city council.
- D. A qualified person may re-register as a Water Well Driller in the same manner as in the original instance, and upon the same conditions.
- E. All Water Well Drillers registrations not renewed within thirty (30) days after the date of

expiration thereof shall be canceled, and a new application for registration must be made and the fee for a new registration paid.

- F. The fee for registration shall be as set by the city council by motion or resolution.
- G. The city council, upon at least ten (10) days' notice and adequate opportunity for a public hearing, may revoke the city registration of any water well driller for violating any provisions of the ordinances or regulations of the city relating to the installation of a water well system or for any other cause specified by the State of Oklahoma.
- H. Every person receiving a certificate as a water well driller shall file with the City of Choctaw a bond in such sum as set by the city, executed with a surety company authorized to do business in the state. The bond shall be conditioned that the principal will install all water well work, fixtures, appliances and equipment in accordance with the State of Oklahoma law and the City adopted building codes, ordinances and other regulations of the city relating to plumbing and electrical systems, and in a workmanlike manner; that the principal shall, without further cost to the person for whom the work was done, remedy any defective or faulty work caused by poor workmanship or inferior or non-standard material; and that the city may be fully indemnified and held harmless from any and all costs, expenses or damage resulting from the performance of work as a water well driller.

§ 5-1004 LOCATION AND DEPTH.

No private domestic or commercial water well shall be drilled, re-drilled, deepened, constructed, or completed to a depth greater than two hundred fifty (250) feet below ground level at the well site. No such well shall be located nearer than a minimum of twenty-five (25) feet to any property line of the lot or parcel of land on which the well is to be located. All setbacks and separation of the water well shall comply with the adopted International Plumbing Code. (Ord. No. 459, 11/1/94; Ord. No. 586, 11/23/04)

§ 5-1005 PURPOSE, NO CONNECTION TO CITY WATER SYSTEM.

Water from private domestic or commercial water wells located within the city shall be used only for domestic or commercial purposes on the premises where the well is located, and there shall be no interconnection system. The city, through its proper officers, shall be authorized to disconnect the premises on which a private water well is located from the municipal water system if it should be determined that the well has been connected with the municipal water system. (Ord. No. 459, 11/1/94)

§ 5-1006 POLLUTION OF GROUNDWATER PROHIBITED.

The owner of a water well shall not permit fertilizers, insecticides, or deleterious substances of any kind that might pollute the ground waters underlying the city to enter the well. (Ord. No. 459, 11/1/94)

§ 5-1007 INSPECTION.

All water wells shall be open and accessible at all times for inspection and for the taking of water samples by the Oklahoma Department of Environmental Quality (ODEQ), the city-county health department, the city engineer, and other representatives of the Choctaw Utilities Authority or the city. (Ord. No. 459, 11/1/94)

§ 5-1008 CEASE AND DESIST ORDERS.

The city council may issue cease and desist orders to all users of water from wells drilled, re-drilled, deepened, or completed to the Garber-Wellington sandstone formation during periods of drought or low water supply if the city council shall find and determine that such order is necessary to safeguard the welfare of the residents of the city. The city council may also require the abandonment and plugging of any water well that is found and determined to be causing pollution of the water-producing sands from which the city takes its water supply. (Ord. No. 459, 11/1/94)

§ 5-1009 STATE REQUIREMENTS, MUD AND EROSION CONTROL.

In the drilling, re-drilling, deepening, reconditioning, construction or completion of a water well, the well driller shall meet and comply with all minimum requirements and regulations of the City Building Codes, Oklahoma Water Resources Board and of the ODEQ relating to water wells. No mud shall be permitted to escape onto an adjoining street but shall be hauled away and disposed of so as not to damage the streets or private property. Erosion shall be controlled in accordance with the Code of Ordinance on surface water conservation, as amended. (Ord. No. 459, 11/1/94)

Ed. Note: § 18-101 of this code were originally enacted as Ord. No. 414.

§ 5-1010 SEALING AND CAPPING.

When a water well is temporarily removed from service, it shall be sealed and capped as required by applicable rules and regulations of the Oklahoma Water Resources Board. If a well is nonproductive of water or abandoned for any reason, the well shall be filled with cement grout to at least four (4) feet below the land surface and the owner shall comply with all regulations of the Oklahoma Water Resources Board with respect to the plugging and capping of abandoned well. (Ord. No. 459, 11/1/94)

§ 5-1011 INDUSTRIAL WATER WELL PROHIBITED.

No industrial water well shall be drilled, used or operated within the city. (Ord. No. 459, 11/1/94)

§ 5-1012 PENALTY.

Any person, firm or corporation who shall violate any provision of this chapter, or fail to comply with any provision hereof, shall be guilty of an offense and upon conviction shall be punished by fine and costs not to exceed the general penalty clause under § 1-108 of this code. Each day that any such violation or violations continues shall constitute a separate offense. (Ord. No. 459, 11/1/94)

CHAPTER 11

INTERNATIONAL RESIDENTIAL CODE

- § 5-1101. Adoption of the international residential code.
- § 5-1102. Additions, insertions and changes to the international residential code
- § 5-1103. Registration, permits and fees.

§ 5-1101 ADOPTION OF THE INTERNATIONAL ~~MECHANICAL~~ RESIDENTIAL CODE.

That certain documents, three (3) copies of which are on file in the office of the City Clerk and the City of Choctaw, being marked and designated as *International Residential Code, 2015 Edition*, as published by the International Code Council Inc. be and is hereby adopted as the Residential Code of the City of Choctaw in the State of Oklahoma for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of one- and two-family dwellings and townhouses not more than three stories in height in the City of Choctaw and providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said Residential Code on file and any revisions or amendments thereto, which are on file in the office of the City Clerk are hereby referred to, adopted and made a part hereof as if fully set out in this Ordinance. (Prior Code, § 4-53, as amended; Ord. No. 552, 6/18/02)

§ 5-1102 ADDITIONS, INSERTIONS AND CHANGES TO THE INTERNATIONAL RESIDENTIAL CODE.

Any additions, insertions and changes to the International Residential Code, 2015 edition is shown in Amendment A-11 of the Building Regulations and Codes.

§ 5-1103 REGISTRATION, PERMITS AND FEES.

- A. It is unlawful for any person to engage in the business, trade, or occupation of a mechanical contractor, electrical contractor, or plumbing contractor or of a trade's journeyman or apprentice, in this city unless he is registered with the city and has a current and valid certificate of registration issued by the city.
- B. A private home owner can engage and be permitted in the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of a single family dwelling for the building trade, electrical trade, or plumbing trade if the following items can be met by the private home owner:
1. The subject property owner's name(s) shall be on the recorded deed with the Oklahoma County Clerk's Office for one (1) year or a homestead exemption status has been issued to the property owner by the Oklahoma County Assessor's Office;
 2. The subject single family dwelling's address matches the property owner's valid Oklahoma driver's license or identification card;
 3. The property owner has permanently occupied the single family dwelling for one (1) year;
 4. The property owner has a utility bill from the Choctaw Utilities Authority and an electric bill from the local electric company for one (1) year; and
 5. All property taxes and liens implemented by the City of Choctaw are paid and full.
- C. A private home owner who can meet all the requirements listed in 5-603 (B) shall register with the City of Choctaw. A private home owner registration fee for work in the building, plumbing or electrical trade shall be applied and that said fee shall be prescribed by motion or resolution passed by the city council.
- D. Only persons who have current and valid licenses as mechanical contractor, mechanical journeyman, or mechanical apprentice issued by the City of Choctaw and by the State of Oklahoma Construction Industrial Board can perform any design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of a single family dwelling for the mechanical trade. Individual private home owners are not permitted to perform any mechanical trade as required in Title 59, Chapter 43A of the State of Oklahoma statutes.
- E. Applicants for certificates of registration, after complying with the laws of the state and with the city code, and after payment of the fee hereinafter specified, shall be registered

by the City of Choctaw. The registration shall expire at the end of the fiscal year, but may be renewed from year to year. Mechanical, electrical, or plumbing contractor, journeyman, or apprentice desiring to renew their registration shall furnish the same evidence of compliance with state licensing laws and the same bond, fee, renewal, revoke, certificate, hearing or any other requirement set forth in the City of Choctaw Code of Ordinances.

A permit to design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance in the building, mechanical, plumbing or electrical trade shall be applied and that said fee shall be prescribed by motion or resolution passed by the city council.

CHAPTER 12

INTERNATIONAL EXISTING BUILDING CODE

§ 5-1201 Adoption of the International Existing Building Code.

§ 5-1202 Additions, insertions and changes to the International Existing Building Code.

§ 5-1201 ADOPTION OF THE INTERNATIONAL EXISTING BUILDING CODE.

That certain documents, three (3) copies of which are on file in the office of the City Clerk and the City of Choctaw, being marked and designated as *International Existing Building Code, 2015 Edition* as published by the International Code Council, Inc., be and is hereby adopted as the existing building code of the City of Choctaw in the State of Oklahoma for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of existing building in the City of Choctaw and providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said Existing Building Code on file, and any revisions or amendments thereto, which are on file in the office of the City Clerk are hereby referred to, adopted and made a part hereof as if fully set out in this Ordinance.

§ 5-1202 ADDITIONS, INSERTIONS AND CHANGES TO THE INTERNATIONAL EXISTING BUILDING CODE.

Any additions, insertions and changes to the International Existing Building Code, 2015 edition is shown in Amendment A-12 of the Building Regulations and Codes.

CHAPTER 13

INTERNATIONAL PROPERTY MAINTENANCE CODE

- § 5-1301 Adoption of the international maintenance code.
- § 5-1302 Additions, insertions and changes to the international property maintenance code.

§ 5-1301 ADOPTION OF THE INTERNATIONAL PROPERTY MAINTENANCE CODE.

That certain documents, three (3) copies of which are on file in the office of the City Clerk and the City of Choctaw, being marked and designated as *International Property Maintenance Code*, as published by the International Code Council, Inc., be and is hereby adopted as the property maintenance code of the City of Choctaw for the control of buildings and structures as herein provided; and each and all of the regulations, provisions, penalties, conditions and terms of said Property Maintenance Code, and any revisions or amendments thereto which are on file in the office of the City Clerk are hereby referred to, adopted and made a part hereof as if fully set out in this Ordinance. (Ord. No. 457, 11/1/94; Ord. No. 553, 7/2/02)

§ 5-1302 ADDITIONS, INSERTIONS AND CHANGES TO THE INTERNATIONAL PROPERTY MAINTENANCE CODE.

Any additions, insertions and changes to the International Property Maintenance Code, 2015 edition is shown in Amendment A-13 of the Building Regulations and Codes.

CHAPTER 14

{RESERVED}

CHAPTER 15

MOVING BUILDINGS

- § 5-1501 Definitions.
- § 5-1502 Application and permit.
- § 5-1503 Fee.
- § 5-1504 Time to be specified on permit.
- § 5-1505 Approval by police chief, manager, routes.
- § 5-1506 Pneumatic tires.
- § 5-1507 Move to be accomplished diligently.
- § 5-1508 Warnings and attendants.
- § 5-1509 Penalties.

§ 5-1501 DEFINITIONS.

As used in this chapter, the following terms shall have the meanings respectively ascribed to them in this section:

- A. "Building" and "structure" as used herein shall only include those large buildings and structures which are oversized or regular equipment and require special equipment to move. Such buildings and structures, mobile and manufactured homes shall comply with the requirements of Title 47 Oklahoma Statutes Chapter 14 and as same may be hereinafter amended, and same is hereby incorporated into and made a part of this chapter for all purposes as if fully set out herein in word and character; and
- B. "Mobile home" shall be as defined as homes built as dwelling units of at least 320 square feet in size with a permanent chassis to assure the initial and continued transportability of the home. Used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air conditioning, and electrical systems contained thereon. All transportable sections of manufactured homes built in the U.S. on or before June 15, 1976.
- C. "Manufactured Home" defined as a structure, transportable in one or more sections, which, in the traveling mode, is eight (8) body feet or more in width or forty (40) body feet or more in length, or, when erected on site, is three hundred twenty (320) or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air conditioning, and electrical systems contained thereon. All transportable sections of manufactured homes built in the U.S. on or after June 15, 1976.

§ 5-1502 APPLICATION AND PERMIT.

It is unlawful for any person to move any building, structure or manufactured home along or across any street, road, public ground or thoroughfare within the city and a mobile home within the City Limits of Choctaw without first filing an application for and obtaining a permit to do so. After the city manager or designee has approved the application, the City of Choctaw may issue the permit, subject to the provisions of this chapter. In the event such building, structure or manufactured home remains within the city without a permit then each day such building, structure or manufactured home remains shall be a separate offense and the owner or persons in possession or the mover thereof shall be deemed in violation hereof. (Ord. No. 217, 3/2/82)

§ 5-1503 FEE.

The fee for a permit required by this chapter shall be set by the council for buildings and structures and manufactured homes. The fees shall be paid to the office of the city clerk when the permit is issued. (Ord. No. 217, 3/2/82)

§ 5-1504 TIME TO BE SPECIFIED ON PERMIT.

A permit issued under this chapter shall state the time when it is contemplated that the moving will terminate. (Ord. No. 217, 3/2/82)

§ 5-1505 APPROVAL BY POLICE CHIEF, MANAGER, ROUTES.

- A. No permit for the moving of any building, structure or manufactured home shall be issued until the route to be taken in such moving and the time when such structure shall start moving on the street or public ground has been approved in writing by the chief of police and proper arrangements made with the chief of police to provide a police escort for the purpose of regulating traffic along the route to be followed, if same is determined necessary by the chief of police.

- B. The chief of police shall have authority to refuse to approve the proposed route for the moving of a building, structure or manufactured home if, in his judgment, the moving would cause irreparable damage to trees or shrubbery, or until written permission of the utility company has been obtained if it is necessary to change the height of any overhead utility wire to allow the passage of the building or structure, the applicant shall secure the approval of the manager when it is necessary to change the height of the wires used in connection with overhead electric signal lights in order to move the structure. (Ord. No. 217, 3/2/82)

§ 5-1506 PNEUMATIC TIRES.

No permit shall be issued under this chapter unless the moving wheels upon the structure to be moved are surrounded with pneumatic tires and unless the wheels travel upon that portion of the street between curb and curb. (Ord. No. 217, 3/2/82)

§ 5-1507 MOVE TO BE ACCOMPLISHED DILIGENTLY.

All movers authorized by a permit issued under this chapter shall continue with diligence in a good and working manner from the time they are started until time of completion, except when due to matters beyond the control of the mover. (Ord. No. 217, 3/2/82)

§ 5-1508 WARNINGS AND ATTENDANTS.

In the event that it is necessary to leave a structure being moved on the street or public land or any part thereof, due to mechanical failures or otherwise, the same shall at all times be attended by a watchman, who shall signal an appropriate red warning flag to oncoming traffic, and during the hours of twilight or darkness, the watchmen shall also signal with an electric light. In addition, suitable flares shall be placed on either side of the structure for a distance of seventy-five (75) feet. (Ord. No. 217, 3/2/82)

§ 5-1509 PENALTIES.

Any person, firm or corporation or other legal entity who shall violate any of the provisions of this chapter or fails to comply therewith, or with any of the requirements thereof, shall be deemed guilty of an offense punishable as provided in § 1-108 of this code. (Ord. No. 217, 3/2/82)

CHAPTER 16

{RESERVED}

CHAPTER 17

{RESERVED}

CHAPTER 18

PENALTY

- § 5-1801 Penalty.
§ 5-1802 Relief in courts.

§ 5-1801 PENALTY.

Any person, firm or corporation who shall engage in any business, trade or vocation for which a license, permit, certificate or registration is required by this part, without having a valid license, permit, certificate, or certificate of registration as required, or who shall fail to do anything required by this part or by any code adopted by this part, or who shall otherwise violate any provision of the chapters in this part or of any code adopted by this part, or who shall violate any lawful regulation or order made by any of the officers provided for in this part, shall be guilty of an offense, and upon conviction thereof, shall be punished as provided in § 1-108 of this code.

A person who violates a provision of this code or fails to comply therewith or with any of the requirements thereof, or who erects, constructs, alters, repairs or removes, or has erected, constructed, altered, repaired or removed a building or structure in violation of a detailed statement or plan submitted and approved thereunder or of a permit or certificate issued thereunder, shall be guilty of a misdemeanor, and upon conviction shall be punished any sum as provided in § 1-108 of this code, including costs. Each day upon which a violation continues shall be deemed a separate offense

§ 5-1802. RELIEF IN COURTS.

No penalty imposed by and pursuant to this part shall interfere with the right of the city also to apply to the proper courts of the state for a mandamus, and injunction or other appropriate action against such person, firm or corporation.

**Amendment A-1
{Reserved}**

**Amendment A-2
2015 International Building Code**

Part 5 – BUILDING REGULATIONS AND CODES

International Building Code®, 2015 Edition (IBC®, 2015)

Part 5, Chapter 2 “*International Building Code*”

The following sections, paragraphs, and sentences of the *2015 International Building Code* are hereby amended as follows: Standard type is text from the IBC. Underlined type is text inserted. ~~Lined through type is deleted text from IBC.~~

101.1 Title. These regulations shall be known as the Building Code of the City of Choctaw, hereinafter referred to as “this code”.

Section 105.1.1 Annual permit. 105.1.1 Instead of an individual construction permit for each alteration to an already approved system or equipment or application installation, the code official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit. An annual permit is a yearly permit which represents a group of individual permits for each alteration to an already approved electrical, gas, mechanical or plumbing installation. The building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

Section 105.1.2 Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The code ~~code~~ building official

shall have access to such detailed records of alterations at all times ~~or such records shall be filed with the code official as designated.~~ At the completion of the entity's annual permit term, the applicant shall file such detailed records of alterations with the building official. Pursuant to the authority of 59 O.S. § 1000.25, the building official shall collect fees for each individual permit which is part of the annual permit once the detailed records are submitted and remit such fees to the OUBCC.

Section 105.2 Work exempt from permit; under sub-title entitled "Building" delete items 1, 2, 10 and 11 and re-number as follows:

Building:

1. (Unchanged)
2. ~~Fences not over 7 feet (1829 mm) high.~~
3. (Unchanged)
4. (Unchanged)
5. (Unchanged)
6. (Unchanged)
7. (Unchanged)
8. (Unchanged)
9. (Unchanged)
10. ~~Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.~~
11. (Unchanged)
12. (Unchanged)
13. (Unchanged)

Section 202 Definitions

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to individuals who are rendered incapable of self-preservation by the services provided. This group may include but not be limited to the following:

- Dialysis centers
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

ASSISTED LIVING FACILITIES. A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff.

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.

SAFE ROOM. A building or structure or portions thereof, constructed in accordance with ICC/NSSA Standard for the design and construction of Storm Shelters®, (ICC 500®), and constructed to provide near-absolute protection for its occupants from severe wind storm events such as tornados or hurricanes.

1. **Community safe room.** A safe room designed and constructed in accordance with the Federal Emergency Management Agency (FEMA) document P-361 entitled "Design and Construction Guidance for Community Safe Rooms® (FEMA P-361®), intended to provide life-safety protection for more than 16 persons.
2. **Other Safe Room.** A safe room designed and constructed in accordance with FEMAP-361® "Design and Construction Guidance for Community Safe Rooms" or FEMA P-320® entitled "Taking Shelter from the Storm: Building a Safe Room for your Home or Small Business®," located in a residence or non-residential building or structure, intended to provide life-safety protection for 16 persons or less.

SPECIAL INSPECTOR. A qualified person employed or retained by an approved agency who shall prove to the satisfaction of the registered design professional in responsible charge and ~~approved~~ by the Building Official as having the competence necessary to inspect a particular type of construction requiring special inspection.

Section 305.2.4 Seven or fewer children in a detached dwelling. A facility such as the above within a detached dwelling and having seven or fewer children receiving such day care shall be permitted to comply with the International Residential Code® (IRC®). This number shall include children two and one half years or less of age.

Section 305.2.5 Eight to twelve children in a detached dwelling. This section has been added to read: 305.2.5 Eight to 12 children in a detached dwelling. A facility such as the above within a detached dwelling and having eight to 12 children receiving such day care shall comply with the IRC® provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the IRC®. This number shall include children two and one-half years or less of age.

Section 310.5.2 Lodging houses. Owner-occupied lodging houses with four or fewer guest rooms shall be permitted to be constructed in accordance with the IRC®.

Section 403.1 Applicability.

Exception 3; The open air portion of a building [remainder unchanged]

Section 406.3.5.1 Carport separation. A fire separation is not required between a Group R-2 and U carport provided that the carport is entirely open on all sides and that the distance between the two is at least 10 feet (3048 mm).

Section 406.7.2.1 Canopies used to support gaseous hydrogen lighter-than-air systems. Canopies used to support lighter-than-air gaseous systems. Canopies that are used to shelter dispensing operations where flammable compressed gases are located on the roof of the canopy shall be in accordance with the following:

1. The canopy shall meet or exceed Type I construction requirements.
2. Operations located under canopies shall be limited to refueling only.
3. The canopy shall be constructed in a manner that prevents the accumulation of gas.

Section 406.7.2.2. Canopies sheltering units and devices that dispense lighter-than-air gas. Where CNG, LNG, or Hydrogen motor fuel dispensing devices are installed beneath a canopy, the canopy shall be designed to prevent the accumulation or entrapment of ignitable vapors, including provisions for natural or mechanical ventilation means, or all electrical equipment installed beneath the canopy or within the enclosure shall be suitable for Class I, Division 2 hazardous (classified) locations. Tank vents that are installed within or attached to the canopy shall extend a minimum of 5 feet (1524 mm) above the highest projection of the canopy. Compression and storage equipment located on the top of the canopy shall be in accordance with current State of Oklahoma adopted International Fire Code®, Section 2309.

Section 419.1 General. 419.1 General. A live/work unit shall comply with Sections 419.1 through 419.9.

Exceptions:

1. Dwelling or sleeping units that include an office that is less than 10 percent of the area of the dwelling unit are permitted to be classified as dwelling units with accessory occupancies in accordance with Section 508. 2.
2. Group B, M, and F occupancies that are located in a detached dwelling unit complying with the limitations of Section 419.1.1 shall be permitted to be constructed in accordance with the IRC®.

Section 419.1.1 Limitations. The following shall apply to all live/work areas:

1. The nonresidential portion of the live/work unit is permitted to be not greater than ~~3,000 square feet (279m²)~~ 2,500 square feet (232 square meters) in area;
2. The nonresidential area is permitted to be not more than 50 percent of the area of each live/work unit;
3. The nonresidential area function shall be limited to the first or main floor only of the live/work unit; and
4. Not more than five nonresidential workers or employees are allowed to occupy the nonresidential area at any one time.

Section 423 Storm Shelters. Section 423 Storm Shelters and Safe Rooms.

Section 423.1 General. In addition to other applicable requirements in this code, storm shelters and safe rooms shall be constructed in accordance with ~~ICC 500~~ the definitions and this section.

Section 423.1.1 Scope. This section applies to the construction of above or below ground storm shelters or safe rooms constructed as separate detached buildings, or rooms within buildings, structures, or portions thereof for the purpose of providing safe refuge from storms that produce high winds, such as tornados. Any room or structure, as may be used as a place of refuge during a severe wind storm event, shall not be defined as a storm shelter or safe room unless specifically designed to the requirements as listed in Section 423 or constructed as safe rooms within buildings for the purpose of providing safe refuge from storms that produce high winds, such as tornados and hurricanes. Such structures shall be designated to be hurricane shelters, tornado shelters, or combined hurricane and tornado shelters.

Section 423.2 Definitions. The following terms are defined in Chapter 2 of this code:

1. SAFE ROOM.

- (i) Community safe room.
- (ii) Other safe room.

2. STORM SHELTER.

- (i) Community storm shelter.
- (ii) Residential storm shelter.

Section 423.5 Required. Where storm shelters and safe rooms are provided, they shall be provided in compliance with ICC 500® except as required by Sections 423.5.1 through 423.5.2.3.

Section 423.5.1 Number of doors. The number of means of egress doors from a storm shelter or safe room shall be determined based upon the occupant load for the normal occupancy of the space in accordance with Chapter 10 of this code. For facilities used solely for storm shelters or safe rooms, the number of doors shall be as specified in Section 423.5.1.1 based upon the occupant load as calculated in ICC 500®, Section 501.1. Where only one means of egress is provided and the occupant load as calculated per ICC 500®, Section 501.1 is 16 or more but less than 50, an emergency escape opening shall be provided in accordance with ICC 500® Section 501.4.

Section 423.5.1.1 Minimum number of doors per storm shelter or safe room. For 1-49 occupants provide a minimum 1 door in storm shelter or safe room; for 50-500 occupants provide a minimum number of 2 doors in storm shelter or safe room; for 501-1000 occupants provide a minimum number of 3 doors in storm shelter or safe room; and for more than 1000 occupants provide a minimum number of 4 doors in storm shelter or safe room.

Section 423.5.2 Sanitation facilities. Toilet and hand-washing facilities shall be located within the storm shelter or safe room and provided in the minimum number shown in Sections 423.5.2.1 through 423.5.2.3.

Section 423.5.2.1 Temporary sanitary fixtures. Temporary sanitary fixtures, chemical toilets or other means approved by the authority having jurisdiction shall be provided in community storm shelters and community safe rooms when an occupant load as calculated per ICC 500®, Section 501.1 is 16 or more but less than 50.

Section 423.5.2.2 Permanent sanitary fixtures. Permanent toilet and hand-washing facilities shall be located within community storm shelters and community safe rooms with an occupant load of 50 or more based upon the occupant load as calculated in ICC 500®, Section 501.1. One toilet facility per 500 occupants, or portions thereof and one hand-washing facility per 1000 occupants, or portions thereof shall be provided based upon the occupant load as calculated by ICC 500® Section 501.1

Section 423.5.2.3 Additional facilities. Where the required number of sanitation facilities for the community storm shelter or community safe room, as calculated per Section 423.5.2.2 exceeds the number of facilities provided for the normal occupancy of the space, the additional facilities shall be permitted to be temporary sanitary fixtures, chemical toilets, or other means as approved by the authority having jurisdiction.

506.2.2 Open Space Limits. Such open space shall be either on the same lot or dedicated for public use and shall be accessed from a street or approved fire lane. In order to be considered as

accessible, if not in direct contact with a street or fire lane, a minimum 10-foot wide pathway meeting fire department access from the street or approved fire lane shall be provided.

Section 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M fire area exceeds 12,000 square feet (1115 square meters).
2. A Group M fire area is located more than three stories above grade plane.
3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 square meters).
4. A Group M occupancy where the cumulative area used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 square meters).

903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

1. A Group S-1 fire area exceeds 12,000 square feet (1115 square meters).
2. A Group S-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 square meters).
4. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 square meters).
5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 square meters). Exception: Self-service storage facility where the fire area is less than 5,000 square feet (464 square meters).

[F] 903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and

3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.

Section 907.2.3 Group E. A manual fire alarm system that ~~initiates~~ activates the occupant notification signal ~~utilizing an emergency voice/alarm communication system meeting the requirements of~~ in accordance with Section 907.5 and installed in accordance with 907.6 shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed such systems or detectors shall be connected to the building fire alarm system.

Exceptions:

1. A manual fire alarm system is not required in Group E occupancies with an occupant load of 50 or less.
2. ~~Emergency voice/alarm ... in accordance with Section 907.5~~
3. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:
 - (i.) Interior corridors are protected by smoke detectors.
 - (ii.) Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat detectors or other approved detection devices.
 - (iii.) Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.
 - (iv.) The capability to activate the evacuation signal from a central point is provided.
 - (v.) In buildings where normally occupied spaces are provided with a two-way communication system between such spaces and a constantly attended receiving station from where a general evacuation alarm can be sounded, except in locations specifically designated by the fire code official.
4. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:
 - (i.) The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.
 - (ii.) ~~The emergency voice/alarm communication system will activate on~~ sprinkler water-flow fire alarm system will activate on sprinkler water-flow.

(iii.) Manual activation is provided from a normally occupied location.

Section 911.1.3 Size. The room shall be a minimum of 200 square feet (19 square meters) with a minimum dimension of 10 feet (3048 mm). Exception: When approved by the fire code official the fire command center can be reduced in size to not less than a minimum of 96 square feet (9 square meters) with a minimum dimension of 8 feet (2438 mm).

Section 1010.1.10 Panic and fire exit hardware. Doors serving a Group H occupancy and doors serving rooms or spaces with an occupant load of 50 or more in a group A or E occupancy shall not be provided with a latch or lock other than panic hardware or fire exit hardware.

Exceptions:

1. A main exit of a Group A occupancy shall be permitted ~~to be locking~~ to have locking hardware in accordance with Section 1010.1.9.3, Item 2.
2. Doors serving a Group A or E occupancy shall be permitted to be electromagnetically locked in accordance with Section 1010.1.9.9.

Electrical rooms and working spaces with equipment operating at more than 600 volts, nominal, and equipment operating at 600 volts or less, nominal and rated 800 amperes or more and that contain overcurrent devices, switching devices or control devices with exit or exit access doors, shall be equipped with panic hardware or fire exit hardware. The doors shall swing in the direction of egress travel. Exception: Personnel entrance to and egress from doors of the electrical equipment working spaces that are greater than 25 feet (7.6 m) from the nearest edge of the electrical equipment.

Section 1015.6 Mechanical equipment, systems and devices. Guards shall be provided where various components that require services are located ~~within 10 feet (3048 mm) or a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of such components.~~ on a roof or elevated structure and have a condition as set forth in Sections 1015.6.1 through 1015.6.3. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.

Exception: When approved by the authority having jurisdiction, guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of walking surfaces.

Section 1015.6.1 Roof edge. Guards shall be provided when components are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface or elevated structure and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of the component that requires service.

Section 1015.6.2 Skylights. Guards shall be provided when a skylight is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the skylight.

Exceptions:

1. Guards are not required when the skylight is located at least 42 inches (1067 mm) above the highest point of the walking surface adjacent to the skylight or component.
2. Guards are not required if some other provision for skylight fall-thru protection is provided and approved by the authority having jurisdiction.

Section 1015.6.3 Roof hatch. Guards shall be provided when a roof hatch is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the roof hatch. If the component is within 10 feet (3048 mm) of the ladder access side of the roof hatch, the guard shall incorporate a self-closing, self-latching gate. The gate shall have a top edge of not less than 42 inches (1067 mm) above the elevated surface adjacent to the gate and shall not allow the passage of a 21 inch (533 mm) sphere.

Section 1015.7 Roof access. 1015.7 Roof access. Guards shall be provided where the roof hatch opening is located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side ~~of a walking surface and such edge or open side~~ is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.

Exception: When approved by the authority having jurisdiction, guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of the walking surfaces.

Section 1611.1 Design rain loads. Each portion of a roof shall be designed to sustain the load of rainwater that will accumulate on it if the primary drainage system for that portion is blocked plus the uniform load caused by water that rises above the inlet of the secondary drainage system at its design flow. The design rainfall shall be based on ~~the 100-year hourly rainfall rate indicated~~

~~in Figure 1611.1 or on other rainfall rates determined from approved local weather data~~ a rainfall rate of 10.2 inches per hour.

Section 1809.4 Depth and width of footings. The minimum depth of footings below the undisturbed ground surface shall be 12 inches (305 mm). Where applicable, the requirements of Section 1809.5 shall also be satisfied. The minimum width of footings shall be 12 inches (305 mm).

Exception: Single story free-standing building meeting all of the following conditions shall be permitted without footings:

1. Assigned to Occupancy Category 1, in accordance with Section 1604.5;
2. Light-frame wood or metal construction;
3. Area of 400 square feet (37 square meters) or less;
4. Eave height of 10 feet (3048 mm) or less; and
5. Building height of 15 feet (4572 mm) or less.

Such buildings shall have an approved wooden floor, or shall be placed on a concrete slab having a minimum thickness of 3 1/2 inches (89 mm). Buildings shall be anchored to resist uplift as required by Section 1609.

2902.4.1 Directional signage. Directional signage indicating the route to the required public toilet facilities in group A, B, I, M, and R-1 occupancies shall be posted in a lobby, corridor, aisle, or similar space, such that the sign can be readily seen from the main entrance to the building or tenant space. Only one sign at each main entrance that is intended for public use shall be required.

Exceptions:

1. Group A occupancies that are part of an overall group E occupancy need not have directional signage.
2. Private-use Group B occupancies need not have directional signage.

Section 3201.3 Other Laws. The provisions of this chapter shall not be construed to permit the violation of other laws or ordinances regulating the use and occupancy of public property or to prevent the holders of public right-of-way to grant special permission for encroachments in their rights-of-way greater than those permitted in Section 3202.

Amendment A-3

2015 International Fire Code

Part 5 – BUILDING REGULATIONS AND CODES

International Fire Code®, 2015 Edition (IFC®, 2015)

Part 5, Chapter 3 “*International Fire Code*”

The following sections, paragraphs, and sentences of the *2015 International Existing Building Code* are hereby amended as follows: Standard type is text from the IFC. Underlined type is text inserted. ~~Lined through type is deleted text from IFC.~~

R101.1 Referenced codes and standards. These regulations shall be known as Fire Code of the City of Choctaw, hereinafter referred to as “this code”.

Section R202 – Definitions;

AUTHORITY HAVING JURISDICTION. Means an organization, office, or individual responsible for enforcing the requirements of the City of Choctaw Codes, including the prior authorization or approval of any equipment, materials, installations or procedures used in all or part of the construction of a new, or alteration or renovation of an existing building or structure, including integral finishes, fixtures and building system therein.

DISPENSING AREA. The appropriate hazardous (classified) locations for the fuel being dispensed in accordance with the National Electrical Code® – NFPA® 70.

MAIN RAILROAD TRACK. That part of the railway, exclusive of switch tracks, branches, yards, and terminals upon which trains are operated by timetable or train order or both.

SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

308.1.6.3 Sky lanterns. A person shall not release or cause to be released a sky lantern in the State of Oklahoma per Title 68 O.S. § 1624.1.

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than ~~20-24 feet (6096 mm)~~ 7315 mm, exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than ~~13 feet 6 inches (4115 mm)~~ 14 feet (4267 mm).

Exception: Vertical clearance may be reduced; provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance when approved.

503.2.2 Authority. ~~The fire code official shall have the authority to require or permit modifications to the required access widths~~ an increase in the minimum access widths and vertical clearances where they are inadequate for fire or rescue operations.

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support imposed loads of 80,000 Lbs for fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

503.3 Marking. ~~Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING FIRE LANE~~ Striping, signs, or other markings, when approved by the fire code official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. ~~The means by which fire lanes are designated~~ Striping, signs and other markings shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

1. Striping – Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.
2. Signs – Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high. Signs shall be painted on a white background with letters and borders in red, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

503.4 Obstruction of Fire Apparatus Access Roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1, ~~and~~ 503.2.2 and any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

Section 508.1.3 Size. The fire command center shall be a minimum of 200 square feet (19 square meters) in area with a minimum dimension of 10 feet (3048 mm).

Exception: When approved by the fire code official the fire command center can be reduced in size to not less than a minimum of 96 square feet (9 square meters) with a minimum dimension of 8 feet (2438 mm).

Section 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

5. A Group M fire area exceeds 12,000 square feet (1115 square meters).
6. A Group M fire area is located more than three stories above grade plane.
7. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 square meters).
8. A Group M occupancy where the cumulative area used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 square meters).

903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

6. A Group S-1 fire area exceeds 12,000 square feet (1115 square meters).
7. A Group S-1 fire area is located more than three stories above grade plane.
8. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 square meters).
9. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 square meters).
10. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 square meters). Exception: Self-service storage facility where the fire area is less than 5,000 square feet (464 square meters).

[F] 903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

4. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
5. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
6. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.

Section 907.2.3 Group E. A manual fire alarm system that ~~initiates~~ activates the occupant notification signal ~~utilizing an emergency voice/alarm communication system meeting the requirements of~~ in accordance with Section 907.5 and installed in accordance with 907.6 shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed such systems or detectors shall be connected to the building fire alarm system.

Exceptions:

5. A manual fire alarm system is not required in Group E occupancies with an occupant load of 50 or less.
6. ~~Emergency voice/alarm ... in accordance with Section 907.5~~
7. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:
 - (i.) Interior corridors are protected by smoke detectors.
 - (ii.) Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat detectors or other approved detection devices.
 - (iii.) Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.
 - (iv.) The capability to activate the evacuation signal from a central point is provided.
 - (v.) In buildings where normally occupied spaces are provided with a two-way communication system between such spaces and a constantly attended receiving station from where a general evacuation alarm can be sounded, except in locations specifically designated by the fire code official.
8. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:
 - (i.) The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.
 - (ii.) ~~The emergency voice/alarm communication system will activate on sprinkler water flow~~ fire alarm system will activate on sprinkler water-flow.
 - (iii.) Manual activation is provided from a normally occupied location.

Section 1010.1.10 Panic and fire exit hardware. Doors serving a Group H occupancy and doors serving rooms or spaces with an occupant load of 50 or more in a group A or E occupancy shall not be provided with a latch or lock other than panic hardware or fire exit hardware.

Exceptions:

3. A main exit of a Group A occupancy shall be permitted ~~to be locking to~~ have locking hardware in accordance with Section 1010.1.9.3, Item 2.
4. Doors serving a Group A or E occupancy shall be permitted to be electromagnetically locked in accordance with Section 1010.1.9.9.

Electrical rooms and working spaces with equipment operating at more than 600 volts, nominal, and equipment operating at 600 volts or less, nominal and rated 800 amperes or more and that contain overcurrent devices, switching devices or control devices with exit or exit access doors, shall be equipped with panic hardware or fire exit hardware. The doors shall swing in the direction of egress travel. Exception: Personnel entrance to and egress from doors of the electrical equipment working spaces that are greater than 25 feet (7.6 m) from the nearest edge of the electrical equipment.

Section 1015.6 Mechanical equipment, systems and devices. Guards shall be provided where various components that require services are located ~~within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of such components~~ on a roof or elevated structure and have a condition as set forth in Sections 1015.6.1 through 1015.6.3. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.

Exception: When approved by the authority having jurisdiction, guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of walking surfaces.

Section 1015.6.1 Roof edge. Guards shall be provided when components are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface or elevated structure and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of the component that requires service.

Section 1015.6.2 Skylights. Guards shall be provided when a skylight is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the skylight.

Exceptions:

3. Guards are not required when the skylight is located at least 42 inches (1067 mm) above the highest point of the walking surface adjacent to the skylight or component.
4. Guards are not required if some other provision for skylight fall-thru protection is provided and approved by the authority having jurisdiction.

Section 1015.6.3 Roof hatch. Guards shall be provided when a roof hatch is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the roof hatch. If the component is within 10 feet (3048 mm) of the ladder access side of the roof hatch, the guard shall incorporate a self-closing, self-latching gate. The gate shall have a top edge of not less than 42 inches (1067 mm) above the elevated surface adjacent to the gate and shall not allow the passage of a 21 inch (533 mm) sphere.

Section 1015.7 Roof access. 1015.7 Roof access. Guards shall be provided where the roof hatch opening is located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side ~~of a walking surface and such edge or open side~~ is located more than 30 inches (762 mm) above the floor, roof or grade below. The guard shall be constructed so as to prevent the passage of a sphere 21 inches (533 mm) in diameter.

Exception: When approved by the authority having jurisdiction, guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of the walking surfaces.

Section 1103.4.2 Three to five stories. In other than Group I-2 and I-3 occupancies, interior vertical openings connecting three to five stories shall be protected by either 1-hour fire-resistant-rated construction or an automatic sprinkler system shall be installed throughout the building in accordance with Section 903.3.1.1 or 903.3.1.2.

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages.
3. Vertical opening protection for escalators shall be in accordance with Section 1103.4.5, 1103.4.6 or 1103.4.7.
4. Exit access stairways and ramps shall be in accordance with Section 1103.4.8.
5. Vertical openings that comply with the requirements of Section 803.2.1 of the IEBC®.

Section 1104.1 General. Means of egress in existing buildings shall comply with the minimum egress requirements when specified in Table 1103.1 as further enumerated in Section 1104.2 through 1104.25 ~~and or~~ or the building code that applied at the time of construction, ~~Where the provisions of this chapter conflict with the building code that applied at the time of construction, the most restrictive provision shall apply~~ if, in the opinions of the building official and the fire code official, they do not constitute a distinct hazard to life. Existing buildings that were not required to comply with a building code at the time of construction shall comply with the minimum egress requirements when specified in Table 1103.1 as further enumerated in Sections 1104.2 through 1104.25.

1104.18 Dead ends. Where more than one exit or exit access doorway is required, the exit access shall be arranged such that dead ends do not exceed the limits specified in Table 1104.18. In Group I-2, in smoke compartments containing patient sleeping rooms and treatment rooms, dead end corridors shall be in accordance with Section 1105.5.6.

Exceptions: A dead-end passageway or corridor shall not be limited in length where the length of the dead-end passageway or corridor is less than 2.5 time the least width of the dead-end passageway or corridor. (B) Dead ends that comply with the requirements of Section 805.6 of the IEBC®.

2301.7 Liquid natural gas motor fuel-dispensing facilities. Motor fuel-dispensing facilities utilizing liquid natural gas (LNG) fuel shall comply with the requirements of Section 2303 and Chapter 55.

2302.1 Definitions. The following terms are defined in Chapter 2:

1. AIRCRAFT MOTOR-VEHICLE FUEL-DISPENSING FACILITY.
2. ALCOHOL-BLENDED FUELS.
3. AUTOMOTIVE MOTOR FUEL-DISPENSING FACILITY.
4. DISPENSING AREA.
5. DISPENSING DEVICE, OVERHEAD TYPE.
6. FLEET VEHICLE MOTOR FUEL-DISPENSING FACILITY.
7. LIQUEFIED NATURAL GAS (LNG).
8. MAIN RAILROAD TRACK.
9. MARINE MOTOR FUEL-DISPENSING FACILITY.
10. REPAIR GARAGE.
11. SELF-SERVICE MOTOR FUEL-DISPENSING FACILITY.

2303.1 Location of dispensing devices. Dispensing devices shall be located as follows:

1. Ten feet (3048 mm) or more from lot lines.

2. Ten feet (3048 mm) or more from buildings having combustible exterior wall surfaces or buildings having noncombustible exterior wall surfaces that are not part of a 1-hour-fire-resistance-rated assembly or buildings having combustible overhangs.

Exception: Canopies constructed in accordance with the International Building Code® providing weather protection for the fuel islands.

3. Such that all portions of the vehicle being fueled will be on the premises of the motor fuel-dispensing facility.
4. Such that the nozzle, when the hose is fully extended, will not reach within 5 feet (1524 mm) of building openings.
5. Twenty feet (6096 mm) or more from fixed sources of ignition.
6. Where compressed natural gas (CNG), LNG, or Hydrogen motor fuel-dispensing devices are installed beneath a canopy or within an enclosure, either the canopy or enclosure shall be designed to prevent the accumulation or entrapment of ignitable vapors, including provisions for natural or mechanical ventilation means, or all electrical equipment installed beneath the canopy or within the enclosure shall be suitable for Class I, Division 2 hazardous (classified) locations. Tank vents that are installed within or attached to the canopy or enclosure shall extend a minimum of 5 feet (1524 mm) above the highest projection of the canopy. Compression and storage equipment located on top of the motor fuel-dispensing facility canopies shall be in accordance with current State of Oklahoma adopted International Fire Code®, Section 2309 and International Building Code®, Section 406.

2303.2.1 Local emergency disconnect switches. A local emergency disconnect switch, provided within 20 feet (6096 mm) of any dispensing unit shall be interlocked with all other dispensing units of the same fuel type and all other dispensing devices located within 20 feet (6096 mm) of the local emergency disconnect switch.

2303.2.2 Emergency disconnect switch lighting. Permanent lighting shall be provided during hours of operation in times of darkness at all dispensing devices, required signage, emergency disconnects and emergency shutdown controls. The lighting shall be designed to provide illumination such that all dispensing devices, required signage, emergency disconnect switches and emergency shutdown controls are visible to the operator.

2304.3.7 Quantity limits. Dispensing equipment used at unsupervised locations shall comply with one of the following:

1. Dispensing devices shall be programmed or set to limit uninterrupted fuel delivery to 25 gallons (95 L) and require a manual action to resume delivery.

Exception: Dispensing devices that are equipped with a listed breakaway device or equal approved by the Authority Having Jurisdiction. Such emergency breakaway device shall be installed, maintained and replaced in accordance with the manufacturer's instructions.

2. The amount of fuel being dispensed shall be limited in quantity by a preprogrammed card as approved.

2307.3 Attendants. Motor fuel-dispensing operations for LP-gas shall be conducted by qualified attendants or in accordance with Section 2307.7 by persons trained in the proper handling of LP-gas.

Exception: When the dispensing equipment meets the guidelines of NFPA® 58 for "Low emission transfer" an attendant is not required.

2307.4.1 Low emission transfer. When the dispensing equipment is installed in accordance with Section 6.28.5 of NFPA® 58 for "Low emission transfer," the transfer distance requirements in Table 6.5.2.1 and Section 6.25.4.3(1) of NFPA® 58 shall be reduced by one-half.

2307.7 Public fueling of motor vehicles. Self-service LP-gas dispensing systems, including key, code and card lock dispensing systems, shall be limited to the filling of permanently mounted containers providing fuel to the LP-gas powered vehicle.

The requirements for self-service LP-gas dispensing systems shall be in accordance with the following:

1. The arrangement and operation of the transfer of product into a vehicle shall be in accordance with this section and Chapter 61.
2. The system shall be provided with an emergency shut-off switch located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from dispensers.
3. The owner of the LP-gas motor fuel-dispensing facility or the owner's designee shall provide for the safe operation of the system and the training of users.

Exception: If the LP-gas motor fuel-dispensing facility meets the requirements of a low emission transfer station per NFPA® 58, then training of the users is not the responsibility of the facility.

4. The dispenser and hose-end valve shall release not more than 1/8 fluid ounce (4 cc) of liquid to the atmosphere upon breaking the connection with the fill valve on the vehicle.

5. Portable fire extinguishers shall be provided in accordance with Section 2305.5.
6. Warning signs shall be provided in accordance with Section 2305.6.
7. The area around the dispenser shall be maintained in accordance with Section 2305.7.

2308.3.2 Warning signs. Warning signs complying with Section 310 shall be posted as follows:

1. Warning sign(s) shall be conspicuously posted within sight of each dispenser in the fuel dispensing area and shall state the following:
 - (i) No smoking
 - (ii) Shut off motor
 - (iii) Flammable Gas
 - (iv) Natural gas vehicle fuel cylinders shall be inspected at intervals not exceeding 3 years or 36,000 miles to ensure safe operation of the vehicle
 - (v) Natural gas fuel cylinders past their end-of-life date shall not be refueled and shall be removed from service.
2. A warning sign with the words "No smoking, flammable gas" shall be posted in all compressor and storage areas.
3. The lettering on the sign shall be legible and large enough to be visible from each point of transfer.
4. The service pressure of each dispenser shall be posted in view of the operator.

2308.4 Private fueling of motor vehicles. Self-service CNG dispensing systems, including key, code and card lock dispensing systems, shall be limited to the filling of approved, permanently mounted fuel containers on CNG-Powered vehicles.

In addition to the requirements in Section 2305, the owner of a self-service CNG motor fuel-dispensing facility shall ensure the safe operation of the system ~~and the training of users.~~

2308.7 Emergency shutdown control Device. ~~An emergency shutdown control shall be located within 75 feet (22 860 mm) of, but not less than 25 feet (7620 mm) from dispensers and shall also be provided in the compressor area. Upon activation, the emergency shutdown system shall automatically shut off the power supply to the compressor and close valves between the main gas supply and the compressor and between the storage containers and dispensers. A remote and local emergency manual shutdown control shall be provided. Upon activation, the emergency shutdown system shall automatically close valves between the main gas supply and the compressor and between the storage containers and dispensers, and automatically shut off the power supply to the compressor and the following associated devices: dispensing enclosures; remote pumps; power, control, and signal circuits; and electrical equipment in the hazardous (classified) locations surrounding the fuel dispensing enclosures.~~

All labeled emergency shutdown devices shall be interconnected, whether required or not. Resetting from an emergency shutoff condition shall require manual intervention and the manner of resetting shall be approved by the City of Choctaw.

Exception: In time-fill applications, in lieu of a defined remote and local emergency manual shutdown device, an emergency manual shutdown device shall be provided within 50 feet (15 240 mm) of each fixed point of dispensing hose attachment and located inside and outside the compressor area within 10 feet (3048 mm) of the main access to the compressor area.

2308.7.1 Remote emergency shutdown device. A remote emergency manual shutdown device shall be located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from all dispensing enclosures and shall be provided inside and outside the compressor area within 10 feet (3048 mm) of the main access to the compressor area. Exception: A remote emergency shutdown device may be located greater than 100 feet (30 480 mm) from one or more dispensing enclosures when within line of sight of the dispensing enclosures and approved by the Authority Having Jurisdiction.

2308.7.2 Local emergency shutdown device. A local emergency manual shutdown device shall be located within 15 feet (4572 mm) of each dispensing enclosure.

2311.4.3. Ventilation. Where class I liquids or LP-gas are stored or used within a building having a basement or pit wherein flammable vapors could accumulate, the basement or pit shall be provided with mechanical ventilation in accordance with the International Mechanical Code®, at a minimum rate of 1 1/2 cubic feet per minute per square foot (cfm/square foot) [0.0008 cubic meters per (second meter squared)] taken from a point within 12 inches (305 mm) of the floor to prevent the accumulation of flammable vapors.

2311.5 Preparation of vehicles for repair. For vehicles powered by gaseous fuels, the fuel shutoff valves shall be closed prior to repairing any portion of the vehicle fuel system.

Vehicles powered by gaseous fuels in which the fuel system has been damaged shall be inspected and evaluated for fuel system integrity prior to being brought into the repair garage. The inspection shall include testing of the entire fuel delivery system for leakage. Liquefied Natural Gas (LNG) vehicles shall comply with Section 2311.5.1 as applicable.

2311.5.1 Liquefied Natural Gas. Liquefied Natural Gas (LNG) vehicle fuel system pressure shall be measured and recorded prior to entering the repair facility and at least every third day the vehicle remains in the building. Records shall be posted on the windshield of the vehicle. The maximum allowable system pressure shall be no more than 170 psig. Pressure above 170 psig shall be reduced by operating the vehicle, or limited venting outdoors as required.

2311.7 Repair garages for vehicles fueled by lighter-than-air fuels. Repair garages for the conversion and repair of vehicles that use CNG, liquefied natural gas (LNG), hydrogen or other

lighter-than-air motor fuels shall be in accordance with Sections 2311.7 through 2311.7.2.3 in addition to the other requirements of Section 2311.

Exceptions:

1. Repair garages where work is conducted only on vehicles that have been defueled and their systems purged with nitrogen gas, and where standard operating procedures to document and maintain the fueling status throughout the repair operations has been approved.
2. Repair garages where work is not performed on the fuel system and is limited to exchange of parts and maintenance not requiring open flame or welding on the CNG-, LNG-, hydrogen- or other lighter than-air-fueled motor vehicle.
3. Repair garages for hydrogen-fueled vehicles where work is not performed on the hydrogen storage tank and is limited to the exchange of parts and maintenance not requiring open flame or welding on the hydrogen-fueled vehicle. During the work, the entire hydrogen fuel system shall contain a quantity that is less than 200 cubic feet (5.6 cubic meters) of hydrogen.

2311.7. 1.1 Design. Indoor locations shall be ventilated utilizing air supply inlets and exhaust outlets arranged to provide uniform air movement to the extent practical. Inlets shall be uniformly arranged on exterior walls near floor level. Outlets shall be located at within 18 inches (457 mm) of the high point of the room in exterior walls or the roof.

Ventilation shall be by a continuous mechanical ventilation system or by a mechanical ventilation system activated by a continuously monitoring natural gas detection system or, for hydrogen, a continuously monitoring flammable gas detection system, each activating at a gas concentration of not more than 25 percent of the lower flammable limit (LFL). In all cases, the system shall shut down the fueling system in the event of failure of the ventilation system.

The ventilation rate shall be not less than 1 cubic foot per minute per ~~12 cubic feet~~ $[0.00139 \text{ m}^3 \times (\text{s} - \text{m}^3)]$ one (1) square foot [0.0051 cubic meters per (second square meter)] of room area.

5501.1 Scope. Storage, use and handling of cryogenic fluids shall comply with this chapter and NFPA® 55. Cryogenic fluids classified as hazardous materials shall also comply with the general requirements of Chapter 50. Partially full containers containing residual *cryogenic fluids* shall be considered as full for the purposes of the controls required.

Exceptions:

1. Fluids used as refrigerants in refrigeration systems (see Section 606).
2. Liquefied natural gas (LNG), which shall comply with NFPA® 59 A.
3. LNG facilities for LNG vehicular applications, which shall comply with Chapter 23 and NFPA® 52.

Oxidizing *cryogenic fluids*, including oxygen, shall comply with Chapter 63, as applicable.

Flammable *cryogenic fluids*, including hydrogen, methane, and carbon monoxide, shall comply with Chapters 23 and 58, as applicable.

Inert *cryogenic fluids*, including argon, helium and nitrogen, shall comply with ANSI/CGA P-18.

5705.5 Alcohol-based hand rubs classified as Class I or II liquids. The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids shall be in accordance with all of the following:

1. The maximum capacity of each dispenser shall be 68 ounces (2 L).
2. The minimum separation between dispensers shall be 48 inches (1219 mm).
3. The dispensers shall not be installed above, below, or closer than 1 inch (25 mm) to an electrical receptacle, switch, appliance, device or other ignition source. The wall space between the dispenser and the floor or intervening counter top shall be free of electrical receptacles, switches, appliances, devices or other ignition sources.
4. Dispensers shall be mounted so that the bottom of the dispenser is not less than 42 inches (1067 mm) and not more than 48 inches (1219 mm) above the finished floor.
5. Dispensers shall not release their contents except when the dispenser is manually activated. Facilities shall be permitted to install and use automatically activated "touch free" alcohol-based hand-rub dispensing devices with the following requirements:
 - 5.1. The facility or persons responsible for the dispensers shall test the dispensers each time a new refill is installed in accordance with the manufacturer's care and use instructions.
 - 5.2. Dispensers shall be designed and must operate in a manner that ensures accidental or malicious activations of the dispensing devices are minimized. At a minimum, all devices subject to or used in accordance with this section shall have the following safety features:

- 5.2.1. Any activations of the dispenser shall only occur when an object is placed within 4 inches (98 mm) of the sensing device.
- 5.2.2. The dispenser shall not dispense more than the amount required for hand hygiene consistent with label instructions as regulated by the United States Food and Drug Administration (USFDA).
- 5.2.3. An object placed within the activation zone and left in place will cause only one activation.
6. Storage and use of alcohol-based hand rubs shall be in accordance with the applicable provisions of Sections 5704 and 5705.
7. ~~Dispensers when installed in occupancies with carpeted floors shall only be allowed in smoke compartments or fire areas equipped throughout the approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.3.1.2 over a carpeted area shall have a guard or shield to prevent alcohol-based hand rub product from dispensing onto the floor.~~

6106.1 Attendants. Dispensing of LP-gas shall be performed by a qualified attendant.

Exception: When the dispensing equipment meets the guidelines of NFPA® 58 for "Low emission transfer" an attendant is not required.

6106.2 Overfilling. LP-gas containers shall not be filled or maintained with LP-gas in excess of either the volume determined using the fixed liquid-level gauge installed in accordance with the manufacturer's specifications and in accordance with Section 5.7.5 of NFPA® 58, the volume determined by the overfilling prevention device installed on the container, or the weight determined by the required percentage of water capacity marked on the container. Portable LP-gas containers shall not be refilled unless equipped with an overfilling prevention device (OPD) where required by Section 5.7.3 of NFPA® 58.

Amendment A-4

2015 International Mechanical Code

Part 5 – BUILDING REGULATIONS AND CODES

International Mechanical Code®, 2015 Edition (IMC®, 2015)

Part 5, Chapter 4 “International Mechanical Code”

The following sections, paragraphs, and sentences of the 2015 *International Mechanical Code* are hereby amended as follows: Standard type is text from the IMC. Underlined type is text inserted. ~~Lined through type is deleted text from IMC.~~

Section 101.1. Title. These regulations shall be known as the Mechanical Code of City of Choctaw, hereinafter referred to as “this code”.

Section 106.1.1 Annual permit. Instead of an individual construction permit for each alteration to an already approved system or equipment or application installation, the code official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit. An annual permit is a yearly permit which represents a group of individual permits for each alteration to an already approved electrical, gas, mechanical or plumbing installation. The building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

Section 106.1.2 Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The ~~code~~ building official shall have access to such detailed records of alterations at all times ~~or such records shall be filed with the code official as designated.~~ At the completion of the entity's annual permit term, the applicant shall file such detailed records of alterations with the building official. Pursuant to the authority of 59 O.S. § 1000.25, the building official shall collect fees for each individual permit which is part of the annual permit once the detailed records are submitted and remit such fees to the OUBCC.

Section 301.15 Wind resistance. Mechanical *equipment*, appliances and supports that are exposed to wind shall be designed and installed to resist the wind pressures determined in accordance with the International Building Code®, SMACNA HVAC Duct Construction Standards - Metal and Flexible, and other approved methods.

Section 304.11 Guards. Guards shall be provided where various components that require service ~~and roof hatch openings are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of components that require service. The top of the guard shall be located not less than 42 inches (1067 mm) above the elevated surface adjacent to the guard. The guard shall be constructed so as to prevent the passage of a 21 inch diameter (553 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code* relocated on a roof or elevated structure and have a condition as set forth in Sections 304.11.1~~

through 304.11.3. The top of the guard shall be located not less than 42 inches (1067 mm) above the elevated surface adjacent to the guard. The guard shall be constructed so as to prevent the passage of a 21-inch diameter (533 mm) sphere and shall comply with the loading requirements for guards as specified in the International Building Code®. Guards shall be provided at new components when added or replaced on an existing roof or elevated structure and have a condition as set forth in Sections 304.11.1 through 304.11.3. Exception: When approved by the authority having jurisdiction, guards are not required where permanent fall arrest/restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire roof covering lifetime. The devices shall be reevaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of walking surfaces.

Section 304.11.1 Roof edge. Guards complying with 304.11 shall be provided when components are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface or elevated structure and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of the component that requires service.

Section 304.11.2 Skylights. Guards complying with Section 304.11 shall be provided when a skylight is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the skylight.

Exceptions:

1. Guards are not required when the skylight is located at least 42 inches (1067 mm) above the highest point of the walking surface adjacent to the skylight or component.
2. Guards are not required if some other provision for skylight fall-through protection is provided and approved by the authority having jurisdiction.

Section 304.11.3 Roof hatch. Guards complying with Section 304.11 shall be provided when a roof hatch is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the roof hatch. If the component is within 10 feet (3048 mm) of the ladder access side of the roof hatch, the guard shall incorporate a self-closing, selflatching gate. The gate shall have a top edge of not less than 42 inches (1067 mm) above the elevated surface adjacent to the gate and shall not allow the passage of a 21 inch (533 mm) sphere. If a roof hatch exists within 10 feet of a roof edge that is located more than 30 inches (762 mm) above the floor, roof or grade below and a new component that requires services on that existing roof or elevated structure, than a guard complying with Section 304.11 shall be added between the existing roof hatch and the roof edge.

Section 305.5.1 Location and protection of refrigerant piping. Location and protection of refrigerant piping. Refrigerant piping installed within 1 1/2 inches (38 mm) of the underside of roof decks shall be protected from damage caused by nails and other fasteners.

306.3 Appliances in Attics. Attics containing appliances shall be provided . . . *{bulk of paragraph unchanged}* . . . side of the appliance. The clear *access* opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions are not large enough to allow removal of the largest appliance. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb. (136 kg) capacity.
3. An access door from an upper floor level.
4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

1. The passageway and level service space are not required where the appliance is capable of being serviced and removed... *{remainder of section unchanged}*

Section 306.5 Equipment and appliances on roofs or elevated structures. Where *equipment* requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access such equipment or appliances, ~~an~~ a permanent interior or exterior means of access shall be provided. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). Such access shall not require the use of portable ladders. Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall.

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 rung spacing not to exceed 14 inches (356 mm) on center. The uppermost rung shall not be greater than 24 inches (610 mm) below the upper edge of the roof hatch, roof or parapet, as applicable.
3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.

4. There shall be not less than 18 inches (457 mm) between rails.
5. Rungs shall have a diameter not less than 0.75-inch (19 mm) and be capable of withstanding a 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 per square foot (488.2 kg divided by meters squared). Landing dimensions shall be not less than ~~18 inches (457 mm)~~ and not less than the width of the ladder served. A guard rail shall be provided on all open sides of the landing.
7. Climbing clearance. The distance from the centerline of rungs to the nearest permanent object on the climbing side of the ladder shall be not less than 30 inches (762 mm) measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches (381 mm) shall be provided on both sides of the ladder measured from the midpoint of and parallel with the rungs except where cages or wells are installed.
8. Landing required. The ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches (762 mm) by 30 inches (762 mm) centered in front of the ladder.
9. Ladders shall be protected against corrosion by an *approved* means.
10. Access to ladders shall be provided at all times.

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.

Exceptions:

1. This section shall not apply to Group R-3 occupancies.
2. This section shall not apply to appliance replacement.

306.5.1 Sloped Roofs. Where appliances, *equipment*, fans or other components that require service are installed on a roof having a slope of 3 units vertical in 12 units horizontal (25-percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which *access* is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*. . . . {bulk of paragraph unchanged} . .

306.6 Water Heaters Above Ground or Floor. When the mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A maximum 10 gallon water heater (or larger with approval) is capable of being accessed through a lay-in ceiling and the water heater installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

Section 307.2.1 Condensate disposal. Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an *approved* place of disposal. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope). Condensate drains shall be allowed to terminate to an approved pit or French drain consisting of a minimum of 24 inches by 24 inches by 24 inches (610 mm by 610 mm by 610 mm), or equivalent; of 1 inch (25 mm) washed rock. Such pits or French drains shall be located 30 inches (762 mm) minimum from outer edge of foundation to nearest edge of pit or French drain. Condensate shall not discharge into a street, alley or other areas so as to cause a nuisance.

Section 307.2.3 Auxiliary and secondary drain system. In addition to the requirements *{bulk of paragraph unchanged}* . . . each cooling coil or fuel-fired appliance that produces condensate:

1. *{unchanged}*
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 occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection. However, the conspicuous point shall not create a hazard such as dripping over a walking surface or other areas so as to create a nuisance.
3. *{unchanged}*
4. *{unchanged}*

Exemption: *{unchanged}*

Section 307.2.3.1 Water-level monitoring devices. On down-flow units and all other coils that do not have a secondary drain or provisions to install a secondary or auxiliary drain pan, a water-level monitoring device shall be installed inside the primary drain pan. This device shall shut off the equipment served in the event that the primary drain becomes restricted. Devices installed in the drain line shall not be permitted.

Exception: This section shall not apply to appliances installed in areas outside on the ground or elevated structure where condensate overflow does not damage building components or contents.

Section [F] 502.15 Repair garages. Where Class I liquids or LP-gas are stored or used within a building having a basement or pit wherein flammable vapors could accumulate, the basement or pit shall be provided with ventilation designed in accordance with Section 2311.4.3 of the International Fire Code® to prevent the accumulation of flammable vapors therein.

Section [F] 502.16.1 Design. Indoor locations shall be ventilated utilizing air supply inlets and exhaust outlets arranged to provide uniform air movement to the extent practical. Inlets shall be uniformly arranged on exterior walls near floor level. Outlets shall be located at within 18 inches (457 mm) of the high point of the room in exterior walls or the roof.

Ventilation shall be by a continuous mechanical ventilation system or by a mechanical ventilation system activated by a continuously monitoring natural gas detection system, or for hydrogen, a continuously monitoring flammable gas detection system, each activating at a gas concentration of not more than 25 percent of the lower flammable limit (LFL). In all cases, the system shall shut down the fueling system in the event of failure of the ventilation system.

The ventilation rate shall not be less than 1 cubic foot per minute per ~~12 cubic feet~~ $[0.00138 \text{ m}^3/\text{s} \times \text{m}^3]$ one (1) square foot [0.0051 cubic meters per (second square meter)] of room area.

Section 506.3.1.1 Grease duct materials. Grease ducts serving Type I hoods shall be constructed of non-galvanized carbon steel having a minimum thickness of 0.0575 inch (1.463 mm) (No. 16 gage) or stainless steel not less than 0.0450 inch (1.14 mm) (No. 18 gage) in thickness.

Exception: Factory-built commercial kitchen grease ducts listed and labeled in accordance with UL 1978 and installed in accordance with Section 304.1.

Section 507.2. Type I hoods. Type I hoods shall be installed where cooking appliances produce grease or smoke as a result of the cooking process. Type I hoods shall be installed over medium-duty, heavy-duty, and extra-heavy-duty cooking appliances.

Exceptions: A Type I hood shall not be required for an electric cooking appliance where an approved testing agency provides documentation that the appliance effluent contains 5 mg per cubic meter or less of grease when tested at an exhaust flow rate of 500 cfm (0.236 cubic meters per second) in accordance with UL 710B.

In household cooking occupancies a residential or Type II hood can be installed over a medium-duty household appliance when approved.

604.1 General. Duct insulation shall conform to the requirements of Sections 604.2 through 604.13, the International Energy Conservation Code® and SMACNA HVAC Duct Construction Standards – Metal and Flexible.

Amendment A-5

2014 National Electric Code

Part 5 – BUILDING REGULATIONS AND CODES

National Electric Code®, 2014 Edition (NEC®, 2014)

Part 5, Chapter 5 “National Electric Code”

Article 100 I. General

ENGINEERING SUPERVISION. Supervision by a Qualified Oklahoma Licensed Professional Engineer engaged primarily in the design or maintenance of electrical installations.

INTERSYSTEM BONDING TERMINATION. A device that provides a means for connecting intersystem bonding conductors for communication systems and other systems ~~such as metallic gas piping systems~~ to the grounding electrode system. Bonding conductors for other systems shall not be larger than 6 AWG.

NATIONALLY RECOGNIZED TESTING LABORATORY. A testing facility given this designation from the United States Occupational Safety and Health Administration (OSHA) that provides product safety testing and certification services to manufacturers.

110.2 Approval. The conductors and equipment required or permitted by this *Code* shall be acceptable only if approved. Approval of equipment may be evident by listing and labeling of equipment by a Nationally Recognized Testing Lab (NRTL) with a certification mark of that laboratory or a qualified third party inspection agency approved by the AHJ.

Exception: Unlisted equipment that is relocated to another location within a jurisdiction or is field modified is subject to the approval by the AHJ. This approval may be by a field evaluation by a NRTL or qualified third party inspection agency approved by the AHJ. Manufacturer’s self-certification of any equipment shall not be used as a basis for approval by the AHJ.

Informational Note No. 1: See 90.7, Examination of Equipment for Safety, and 110.3, Examination, Identification, Installation, and Use of Equipment. See definitions of Approved, Identified, Labeled, and Listed.

Informational Note No. 2: Manufacturer's self-certification of equipment may not necessarily comply with US product safety standards as certified by a Nationally Recognized Testing Lab.

Informational Note No. 3: NFPA 790 and 791 provide an example of an approved method for qualifying a third party inspection agency.

110.12 (B) Integrity of Electrical Equipment and Connections. Internal parts of electrical equipment, including busbars, wiring terminals, insulators, and other surfaces, shall not be damaged or contaminated by foreign materials such as paint, plaster, cleaners, abrasives, or corrosive residues. There shall be no damaged parts that may adversely affect safe operation or mechanical strength of the equipment such as parts that are broken; bent; cut; or deteriorated by corrosion, chemical action or overheating. Damaged materials, equipment, appliances, and devices shall not be reused unless such elements have been reconditioned, tested, and placed in good and proper working condition and approved by a nationally recognized testing laboratory, or by the manufacturer of the equipment. Electrical equipment damaged by natural or man-made events shall be reused only as recommended by the manufacturer of such equipment.

Section 210.19 (A) (4) Other Loads. Branch-circuit conductors that supply loads other than those specified in 210.2 and other than cooking appliances as covered in 210.19 (A)(3) shall have an ampacity sufficient for the loads served and shall not be smaller than 14 AWG. 20 ampere general-purpose branch circuits for dwellings shall supply a maximum of 10 outlets. 15 ampere general-purpose branch circuits for dwellings shall supply a maximum of 8 outlets. 20 ampere general-purpose branch circuits for other than dwellings shall supply a maximum of 8 outlets.

{The rest of the section is to be unchanged}

Article 230.70(A) (1) Readily Accessible Location. The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure or inside ~~nearest~~ the point of entrance within 5 feet of the service conductors.

Article 500.8 (A) (3) Suitability; changed to read as follows:

500.8 Equipment. Articles 500 through 504 require equipment construction and installation that ensure safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to installation and maintenance.

Informational Note No. 2: Since there is no consistent relationship between explosion properties and ignition temperature, the two are independent requirements.

Informational Note No. 3: Low ambient conditions require special consideration. Explosionproof or dust-ignitionproof equipment may not be suitable for use at temperatures lower than -25°C (-13°F) unless they are identified for low-temperature service. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified as Class I, Division 1 at normal ambient temperature.

(A) Suitability. Suitability of identified equipment shall be determined by one of the following:

- (1) Equipment listing or labeling
- (2) Evidence of equipment evaluation from a qualified testing laboratory or inspection agency concerned with product evaluation
- (3) Evidence acceptable to the authority having jurisdiction such as a manufacturer's self-evaluation or ~~an owner's engineering judgment~~ an engineering judgment signed and sealed by a qualified Registered licensed Professional Engineer in the State of Oklahoma.

Informational Note: Additional documentation for equipment may include certificates demonstrating compliance with applicable equipment standards, indicating special conditions of use, and other pertinent information. Guidelines for certificates may be found in ANSI/ISA 12.00.02, Certificate Standard for AEx Equipment for Hazardous (Classified) Locations.

Article 505.7 Special Precaution. Modified to read as follows:

Article 505 requires equipment construction and installation that ensures safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to the installation and maintenance of electrical equipment in hazardous (classified) locations.

Informational Note No. 2: Low ambient conditions require special consideration. Electrical equipment depending on the protection techniques described by 505.8(A) may not be suitable for use at temperatures lower than -20°C (-4°F) unless they are identified for use at lower temperatures. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified Class I, Zones 0, 1, or 2 at normal ambient temperature.

- (A) **Implementation of Zone Classification System.** Classification of areas, engineering and design, selection of equipment and wiring methods, installation, and inspection shall be performed by ~~qualified persons Registered~~ a licensed Professional Engineer in the State of Oklahoma with expertise in Hazardous (Classified) locations and Zone Systems. The installation of equipment and wiring methods, and inspections shall be performed by qualified person.

506.7 (A) Implementation of zone classification system. Classification of areas, engineering and design, selection of equipment and wiring methods, shall be performed by a Registered Professional Engineer with expertise in Hazardous (Classified) Locations and Zone Systems. The installation of equipment and wiring methods and inspection shall be performed by qualified persons.

511.2 Definition

MAJOR REPAIR GARAGE. A building or portions of a building where major repairs, such as engine overhauls, painting, body and fender work, ~~and repairs that require draining of the motor vehicle fuel tank are performed on motor~~ maintenance or repairs that require open-flame cutting or welding, and repairs that require draining of the motor vehicle fuel tank are performed on motor vehicles, including associated floor space used for offices, parking, or showrooms.

Article 517.30 Essential Electrical Systems for Hospitals; create a new (H) and add the following language to (G):

(G) Coordination. Overcurrent protective devices serving the equipment branch of the essential electrical system shall be coordinated for the period of time that a fault's duration extends beyond 0.1 second.

Exception No. 1: Between transformer primary and secondary overcurrent protective devices, where only one overcurrent protective device or set of overcurrent protective devices exists on the transformer secondary.

Exception No. 2: Between overcurrent protective devices of the same size (ampere rating) in series.

Informational Note: The terms coordination and coordinated as used in this section do not cover the full range of overcurrent conditions.

(H) Selective Coordination. Overcurrent protective devices serving the life safety, and critical branches of the essential electrical system shall be selectively coordinated with all supply-side overcurrent protective devices.

Exception No. 1: Between transformer primary and secondary overcurrent protective devices, where only one overcurrent protective device or set of overcurrent protective devices exists on the transformer secondary.

Exception No. 2: Between overcurrent protective devices of the same size (ampere rating) in series.

Informational Note: The terms coordination and coordinated as used in this section do not cover the full range of overcurrent conditions.

680.23 (A) (4) Voltage Limitations. No luminaries shall installed for operation on supply circuit over 150 volts between conductors above the low voltage contact limit as defined in Section 680.2.

Amendment A-6

2015 International Plumbing Code

Part 5 – BUILDING REGULATIONS AND CODES

International Plumbing Code®, 2015 Edition (IPC®, 2015)

Part 5, Chapter 6 “International Plumbing Code”

The following sections, paragraphs, and sentences of the *2015 International Plumbing Code* are hereby amended as follows: Standard type is text from the IPC. Underlined type is text inserted. ~~Lined through type is deleted text from IPC.~~

Section 101.1 Title. These regulations shall be known as the International Plumbing Code of City of Choctaw hereinafter referred to as “this code”.

Section 106.1.1 Annual permit. . Instead of an individual construction permit for each alteration to an already approved system or equipment or application installation, the code official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit. An annual permit is a yearly permit which represents a group of individual permits for each alteration to an already approved electrical, gas, mechanical or plumbing installation. The building official is authorized to issue

an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

Section 106.1.2 Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The ~~code~~ building official shall have access to such detailed records of alterations at all times ~~or such records shall be filed with the code official as designated.~~ At the completion of the entity's annual permit term, the applicant shall file such detailed records of alterations with the building official. Pursuant to the authority of 59 O.S. § 1000.25, the building official shall collect fees for each individual permit which is part of the annual permit once the detailed records are submitted and remit such fees to the OUBCC.

106.6.2 Fee schedule. The fees for all plumbing work shall be as indicated in the following schedule: ~~(JURISDICTION TO INSERT APPROPRIATE SCHEDULE)~~ adopted by the governing body of the City of Choctaw.

Section 202 General Definitions

BUILDING DRAIN. That part of the lowest piping of a drainage system that receives the discharge from soil, waste, and other drainage pipes inside and that extends ~~30 inches (762 mm)~~ 5 feet (1524 mm) in developed length of pipe beyond the exterior walls of the building and conveys the drainage to the building sewer.

Section 305.3 Pipes through foundation walls. Any pipe that passes through a foundation wall shall be provided with a relieving arch or pipe sleeve pipe shall be built into the foundation wall. The relieving arch or pipe sleeve shall conform to one of the materials and standards listed in Table 702.2. The sleeve shall be two pipe sizes greater than the pipe passing through the wall.

Section 305.4.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be ~~installed not less than {number} inches (mm)~~ a minimum of 12 inches (305 mm) below finished grade at the point of septic tank connection. Building sewers shall ~~installed not less than {number} inches (mm)~~ be a minimum of 12 inches (305 mm) below grade.

Section 312.2 Drainage and vent water test. A water test shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to the point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest openings of the section under test, and each section shall be filled with water, but no section shall be tested with less than a ~~10 foot (3048 mm)~~ 5 foot (1524 mm) head of water. In testing successive sections, at least the upper ~~10 foot (3048 mm)~~ 5 foot (1524 mm) of the next preceding section shall be tested so that no joint or pipe in the building, except

the uppermost ~~10-foot (3048 mm)~~ 5 foot (1524 mm) of the system, shall have been submitted to a test of less than a ~~10-foot (3048 mm)~~ 5 foot (1524 mm) head of water. This pressure shall be held for at least 15 minutes. The system shall then be tight at all points.

Section 312.3 Drainage and vent air test. Plastic piping shall not be tested using air. An air test shall be made by forcing air into the system until there is a uniform gauge pressure of ~~5-psi (34.5 kPa)~~ 2.5 psi (17.25 kPa) or sufficient to balance a ~~10-inch (254 mm)~~ 5-inch (127 mm) column of mercury. This pressure test shall be held for a test period of not less than 15 minutes. Any adjustments to the test pressure required because of changes in ambient temperatures or the seating of gaskets shall be made prior to the beginning of the test period.

Section 312.6 Gravity sewer test. Where required, gravity sewer tests shall consist of plugging the end of the building sewer at the point of connection with the public sewer, filling the building sewer with water, testing with not less than a ~~10-foot (3048 mm)~~ 5 foot (1024 mm) head of water and maintaining such pressure for 15 minutes.

Section 314.2.1 Condensate disposal. Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an *approved* place of disposal. ... {text unchanged} ... Condensate shall not discharge into a street, alley, sidewalk, rooftop, or other areas so as to cause a nuisance.

Section 405.8 Slip joint connections. Slip joints shall be made with an approved elastomeric gasket and shall only be installed on the trap outlet, trap inlet and within the trap seal from fixture outlet to within 18 inches (457 mm) downstream of trap outlet seal. Fixtures with concealed slip-joint connections shall be provided with an access panel or utility space ~~not less than~~ at least 12 inches (305 mm) in its smallest dimension or other approved arrangement so as to provide access to the slip joint connections for inspection and repair.

Section 412.2.1 Required location for floor drains. Public restrooms and Commercial kitchens. In lieu of floor drains in commercial kitchens, the code official may accept floor sinks.

Section 504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap. ~~Located in the same room as the water heater.~~
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: Multiple relief devices may be installed to a single T & P discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

5. Discharge ~~to the floor~~, to an indirect waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Terminate not more than 6 inches above and not less than two times the discharge pipe diameter above the floor or flood level rim of the waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.

Section 604.5 Size of fixture supply. The minimum size of a fixture supply pipe shall be as shown in Table 604.5. The fixture supply pipe shall terminate not more than 30 inches (762 mm) from the point of connection to the fixture. A reduced size flexible water connector installed between the supply pipe and the fixture shall be of an approved type. The supply pipe shall extend to the floor or wall adjacent to the fixture. The minimum size of individual distribution lines utilized in gridded or parallel water distribution systems shall be as shown in Table 604.5.

Exception: The fixture supply pipe for domestic dishwashers and drinking fountains shall be permitted to be terminated more than 30 inches (762 mm) from the point of connection to the fixture.

Section 614, Lawn Irrigation.

This Section has been newly created and entitled "Section P2914 Lawn Irrigation."

Section 614.1 General. The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- or two-family dwelling.

Section 614.2 Definitions. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in this Section.

1. AIR GAP--A complete physical separation between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel.
2. ATMOSPHERIC VACUUM BREAKER--An assembly containing an air inlet valve, a check seat, and an air inlet port. The flow of water into the body causes the air inlet valve to close the air inlet port. When the flow of water stops the air inlet valve falls and forms a check against back-siphonage. At the same time it opens the air inlet port allowing air to enter and satisfy the vacuum. Also known as an Atmospheric Vacuum Breaker Back-Siphonage Prevention Assembly.
3. BACKFLOW PREVENTION--The mechanical prevention of reverse flow, or back-siphonage, of non-potable water from an irrigation system into the potable water source.
4. BACKFLOW PREVENTION ASSEMBLY--Any assembly used to prevent backflow into a potable water system. The type of assembly used is based on the existing or potential degree of health hazard and backflow condition.
5. COMPLETION OF IRRIGATION SYSTEM INSTALLATION--When the landscape irrigation system has been installed, all minimum standards met, all tests performed, and the irrigator is satisfied that the system is operating correctly.
6. CONSULTING--The act of providing advice, guidance, review or recommendations related to landscape irrigation systems.
7. CROSS-CONNECTION--An actual or potential connection between a potable water source and an irrigation system that may contain contaminants or pollutants or any source of water that has been treated to a lesser degree in the treatment process.
8. DESIGN--The act of determining the various elements of a landscape irrigation system that will include, but not be limited to, elements such as collecting site specific information, defining the scope of the project, defining plant watering needs, selecting and laying out emission devices, locating system components,

conducting hydraulics calculations, identifying any local regulatory requirements, or scheduling irrigation work at a site. Completion of the various components will result in an irrigation plan.

9. DESIGN PRESSURE. The pressure that is required for an emission device to operate properly. Design pressure is calculated by adding the operating pressure necessary at an emission device to the total of all pressure losses accumulated from an emission device to the water source.
10. EMISSION DEVICE. Any device that is contained within an irrigation system and that is used to apply water. Common emission devices in an irrigation system include, but are not limited to, spray and rotary sprinkler heads, and drip irrigation emitters.
11. EMPLOYED. Engaged or hired to provide consulting services or perform any activity relating to the sale, design, installation, maintenance, alteration, repair, or service to irrigation systems. A person is employed if that person is in an employer-employee relationship as defined by Internal Revenue Code, 26 United States Code Service, §3212(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.
12. HEAD-TO-HEAD SPACING. The spacing of spray or rotary heads equal to the manufacturer's published radius of the head.
13. HEALTH HAZARD. A cross-connection or potential cross-connection with an irrigation system that involves any substance that may, if introduced into the potable water supply, cause death or illness, spread disease, or have a high probability of causing such effects.
14. HYDRAULICS. The science of dynamic and static water; the mathematical computation of determining pressure losses and pressure requirements of an irrigation system.
15. INSPECTOR. A licensed plumbing inspector, water district operator, other governmental entity, or irrigation inspector who inspects irrigation systems and performs other enforcement duties for a municipality or water district as an employee or as a contractor.

16. INSTALLER. A person who actually connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is with the City of Choctaw.
17. IRRIGATION PLAN. A scaled drawing of a landscape irrigation system which lists required information, the scope of the project, and represents the changes made in the installation of the irrigation system.
18. IRRIGATION SERVICES. Selling, designing, installing, maintaining, altering, repairing, servicing, permitting, providing consulting services regarding, or connecting an irrigation system to a water supply.
19. IRRIGATION SYSTEM. An assembly of component parts that is permanently installed for the controlled distribution and conservation of water to irrigate any type of landscape vegetation in any location, and/or to reduce dust or control erosion. This term does not include a system that is used on or by an agricultural operation as defined by Oklahoma Water Resources Board.
20. IRRIGATION TECHNICIAN. A person who works under the supervision of a licensed irrigator to install, maintain, alter, repair, service or supervise installation of an irrigation system, including the connection of such system in or to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed with the City of Choctaw.
21. IRRIGATION ZONE. A subdivision of an irrigation system with a matched precipitation rate based on plant material type (such as turf, shrubs, or trees), microclimate factors (such as sun/shade ratio), topographic features (such as slope) and soil conditions (such as sand, loam, clay, or combination) or for hydrological control.
22. IRRIGATOR. A person who sells, designs, offers consultations regarding, installs, maintains, alters, repairs, services or supervises the installation of an irrigation system, including the connection of such system to a private or public, raw or potable water supply system or any water supply.
23. IRRIGATOR-IN-CHARGE. The irrigator responsible for all irrigation work performed by an exempt business owner, including, but not limited to obtaining permits, developing design plans, supervising the work of other irrigators or

irrigation technicians, and installing, selling, maintaining, altering, repairing, or servicing a landscape irrigation system.

24. LANDSCAPE IRRIGATION. The science of applying the necessary amount of water to promote or sustain healthy growth of plant material or turf.
25. LICENSE. An occupational license that is issued by the City of Choctaw to an individual that authorizes the individual to engage in an activity
26. MAINLINE. A pipe within an irrigation system that delivers water from the water source to the individual zone valves.
27. MAINTENANCE CHECKLIST. A document made available to the irrigation system's owner or owner's representative that contains information regarding the operation and maintenance of the irrigation system, including, but not limited to: checking and repairing the irrigation system, setting the automatic controller, checking the rain or moisture sensor, cleaning filters, pruning grass and plants away from irrigation emitters, using and operating the irrigation system, the precipitation rates of each irrigation zone within the system, any water conservation measures currently in effect from the water purveyor, the name of the water purveyor, a suggested seasonal or monthly watering schedule based on current evapotranspiration data for the geographic region, and the minimum water requirements for the plant material in each zone based on the soil type and plant material where the system is installed.
28. MAJOR MAINTENANCE, ALTERATION, REPAIR, OR SERVICE. Any activity that involves opening to the atmosphere the irrigation main line at any point prior to the discharge side of any irrigation zone control valve. This includes, but is not limited to, repairing or connecting into a main supply pipe, replacing a zone control valve, or repairing a zone control valve in a manner that opens the system to the atmosphere.
29. MASTER VALVE. A remote control valve located after the backflow prevention device that controls the flow of water to the irrigation system mainline.
30. MATCHED PRECIPITATION RATE. The condition in which all sprinkler heads within an irrigation zone apply water at the same rate.
31. NEW INSTALLATION. An irrigation system installed at a location where one did not previously exist.

32. PASS-THROUGH CONTRACT. A written contract between a contractor or builder and a licensed irrigator or exempt business owner to perform part or all of the irrigation services relating to an irrigation system.
33. POTABLE WATER. Water that is suitable for human consumption.
34. PRESSURE VACUUM BREAKER. An assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve.
35. RECLAIMED WATER. Domestic or municipal wastewater which has been treated to a quality suitable for beneficial use, such as landscape irrigation.
36. RECORDS OF LANDSCAPE IRRIGATION ACTIVITIES. The irrigation plans, contracts, warranty information, invoices, copies of permits, and other documents that relate to the installation, maintenance, alteration, repair, or service of a landscape irrigation system.
37. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY. An assembly containing two independently acting approved check valves together with a hydraulically operating mechanically independent pressure differential relief valve located between the two check valves and below the first check valve.
38. STATIC WATER PRESSURE. The pressure of water when it is not moving.
39. SUPERVISION. The on-the-job oversight and direction by a licensed irrigator who is fulfilling his or her professional responsibility to the client and/or employer in compliance with local or state requirements.
40. WATER CONSERVATION. The design, installation, service, and operation of an irrigation system in a manner that prevents the waste of water, promotes the most efficient use of water, and applies the least amount of water that is required to maintain healthy individual plant material or turf, reduce dust, and control erosion.
41. ZONE FLOW. A measurement, in gallons per minute or gallons per hour, of the actual flow of water through a zone valve, calculated by individually opening each zone valve and obtaining a valid reading after the pressure has stabilized. For design

purposes, the zone flow is the total flow of all nozzles in the zone at a specific pressure.

42. ZONE VALVE. An automatic valve that controls a single zone of a landscape irrigation system.

Section 614.3 Valid License Required. Any person who connects an irrigation system to the water supply within the City of Choctaw or to a private water system, must hold a valid license with the City of Choctaw.

Exemptions: A property owner is not required to be licensed if he or she is performing irrigation work in a building or on a premises owned or occupied by the person as the person's home. Home or property owner's property must have a current homestead exemption.

A home or property owner who installs an irrigation system must meet the standards contained within this section and the adopted codes regarding spacing, water pressure, spraying water over impervious materials, rain or moisture shut-off devices or other technology, backflow prevention and isolation valves.

Section 614.4 Permit Required. Any person installing an irrigation system within the City of Rockwall is required to obtain a permit from the city. Any plan approved for a permit must be in compliance with the requirements of this chapter.

Exemptions:

1. An irrigation system that is that an on-site sewage disposal system; or
2. An irrigation system used on or by an agricultural operation.

Section 614.5.1 Backflow Prevention Methods and Devices. All backflow prevention methods and devices must conform to Section P2902.5.3 "Lawn Irrigation System."

Section 614.5.2 Missing Backflow Prevention Protection. All irrigation systems found to be without backflow prevention protection that are connected to the potable water supply, must be connected to the potable water supply through an approved, properly installed backflow prevention assembly, before any major maintenance, alteration, repair, or service is performed.

Section 614.6 Backflow Testing. The irrigator shall ensure the backflow prevention device is tested by a licensed plumber prior to being placed in service. The test results must be provided to the City of Choctaw and the irrigation system's owner or owner's representative within ten business days of testing of the backflow prevention device. Test results must be submitted on an approved Backflow Prevention Assembly Test and Maintenance Report form.

Section 614.7 Water Conservation. All irrigation systems shall be designed, installed, maintained, altered, repaired, serviced, and operated in a manner that will promote water conservation

Section 614.8.1 Irrigation Plan Design. An irrigator shall prepare an irrigation plan for each site where a new irrigation system will be installed. A paper or electronic copy of the irrigation plan must be on the job site at all times during the installation of the irrigation system. A drawing showing the actual installation of the system is due to each irrigation system owner after all new irrigation system installations. During the installation of the irrigation system, variances from the original plan may be authorized by the licensed irrigator if the variance from the plan does not:

1. Diminish the operational integrity of the irrigation system; or
2. Violate any requirements of the City of Choctaw or the State of Oklahoma regulations.

Section 614.8.2 Irrigation Plan Drawing. All irrigation plans used for construction must be drawn to scale. The plan must include, at a minimum, the following information:

1. All major physical features and the boundaries of the areas to be watered;
2. North arrow;
3. A legend;
4. The zone flow measurement for each zone;
5. Location and type of each:
 - (i.) Controller;
 - (ii.) Sensor (for example, but not limited to, rain, moisture, wind, flow, or freeze).
6. Location, type, and size of each:
 - (i.) Water source, such as, but not limited to a water meter and point(s) of connection;
 - (ii.) Backflow prevention device;
 - (iii.) Water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick-couplers, bubblers, drip, or micro-sprays;
 - (iv.) Valve, including but not limited to, zone valves, master valves, and isolation valves;
 - (v.) Pressure regulation component; and
 - (vi.) Main line and lateral piping.
7. The scale used; and
8. The design pressure.

Section 614.9 Irrigation Minimum Requirements. All irrigation design and installation must be constructed to the minimum requirement listed below:

Section P614.9.1 Manufacturer's limitations. No irrigation design or installation shall require the use of any component, including the water meter, in a way which exceeds the manufacturer's published performance limitations for the component.

Section 614.9.2 Spacing. The irrigation system shall have the proper spacing that are listed below:

1. The maximum spacing between emission devices must not exceed the manufacturer's published radius or spacing of the device(s). The radius or spacing is determined by referring to the manufacturer's published specifications for a specific emission device at a specific operating pressure.
2. New irrigation systems shall not utilize above-ground spray emission devices in landscapes that are less than 48 inches not including the impervious surfaces in either length or width and which contain impervious pedestrian or vehicular traffic surfaces along two or more perimeters. If pop-up sprays or rotary sprinkler heads are used in a new irrigation system, the sprinkler heads must direct flow away from any adjacent surface and shall not be installed closer than four inches from a hardscape, such as, but not limited to, a building foundation, fence, concrete, asphalt, pavers, or stones set with mortar.
3. Narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public areas may be exempted from this requirement if the runoff drains into a landscaped area

Section 614.9.3 Water Pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator, or pressure compensating spray heads

Section 614.9.4 Irrigation Zones. Irrigation Zones - Irrigation systems shall have separate zones based on plant material type, microclimate factors, topographic features, soil conditions, and hydrological requirements.

Section 614.9.5 Matched Precipitation Rate. Zones must be designed and installed so that all of the emission devices in that zone irrigate at the same precipitation rate.

Section 614.9.6 Impervious Surface. Irrigation systems shall not spray water over surfaces made of concrete, asphalt, brick, wood, stones set with mortar, or any other impervious material, such as, but not limited to, walls, fences, sidewalks, streets, etc.

Section 614.9.7 Master Valve. When provided, a master valve shall be installed on the discharge side of the backflow prevention device on all new installations.

Section 614.9.1.8 Pipe Primer and Solvent. All new irrigation systems that are installed using PVC pipe and fittings shall be primed with a purple colored primer prior to applying the PVC cement in accordance with the City of Choctaw adopted International Plumbing Code.

Section 614.9.1.9 Moisture Shut-Off. All new automatically controlled irrigation systems must include sensors or other technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture. Moisture shut-off technology must be installed according to the manufacturer's published recommendations. Repairs to existing automatic irrigation systems that require replacement of an existing controller must include a sensor or other technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture or rainfall.

All new automatically controlled irrigation systems must include sensors or other technology designed to inhibit or interrupt operation of the irrigation system during periods of freezing weather.

Section 614.9.1.10 Isolation Valve. All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device. The isolation valve must be a ball valve and be equipped with a stainless steel handle. The ball valve must be installed within a plastic valve or meter box large enough as not to hamper operation or repair.

Section 614.9.1.11 Location of Irrigation System. Access shall be provided to backflow preventers, controllers, valves, lines, wire, etc.

Section 614.9.1.11.1 Backflow Preventers. The location of the backflow preventers shall follow the regulations within this Section and the codes adopted in the International Plumbing Code.

Section 614.9.1.11.1.1 Location of Backflow Preventers.

Placement of the Backflow Preventer must meet all manufacture's requirements.

Section 614.9.1.11.1.2 Outdoor Enclosures for Backflow Prevention Device. Outdoor enclosures for backflow prevention devices shall comply with ASSE 1060. This includes any area outside of the building envelope.

Section 614.9.1.11.1.3 Protection of backflow preventers. Backflow preventers shall not be located in areas subject to freezing except where they can be removed by means of unions or are protected by heat, insulation or both.

Section 614.9.1.11.1.4 Relief port. The relief port or air gap fitting of the backflow preventer shall discharge to an approved indirect waste receptor or to the outdoor where it will not cause damage or create a nuisance.

Section 614.9.1.11.2 Location of Irrigation lines and Water emission. The location of the irrigation piping and water emissions from the irrigation system shall follow the regulations within this Section and the codes adopted in the International Plumbing Code.

Section 614.9.1.11.2.1 Public Right of Way and Roadway Easement. Any part or portion of the irrigation piping is encourage to not be installed or located within the public right of way or public roadway easement.

Section 614.9.1.11.2.2 Un-curbed Public Street. Any part or portion of the irrigation piping shall not be located within the public right of way or public roadway easement.

Section 614.9.1.11.2.3 Curbed Public Street. The irrigation system is permitted to be placed within the public right of way or public roadway easement, but any water emitter must be a minimum of twelve inches (12") from the back of the concrete or asphalt curb.

Section 614.9.1.11.2.4 Property Owner. If any portion of an irrigation system is located within a public right of way or public roadway easement must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety or maintenance issues.

Section 614.9.1.12 Depth Coverage of Piping. Piping in all irrigation systems must be installed according to this Section.

Section 614.9.1.12.1 Depth of Main Irrigation Line. The piping must be installed to provide minimum depth coverage of eighteen inches (18") of select backfill, between the top of the pipe and the natural grade of the topsoil.

Section 614.9.1.12.2 Depth of Secondary Irrigation Line. The piping must be installed to provide minimum depth coverage of twelve inches (12”) of select backfill, between the top of the pipe and the natural grade of the topsoil.

Section 614.9.1.12.2.1 Secondary in Bedrock. If the area being irrigated has rock at a depth of twelve inches (12”) or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety issues.

Section 614.9.1.12.3. Obstruction of a Utility. If a utility, man-made structure, or roots create an unavoidable obstacle, which makes the required depth coverage requirement impractical, the piping shall be installed to provide a minimum of twelve inches (12”) for a main irrigation line and eight inches (8”) for a secondary irrigation line of select backfill between the top of the pipe and the natural grade of the topsoil. All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.

Section 614.9.1.13 Wiring Irrigation System. Underground electrical wiring used to connect an automatic controller to any electrical component of the irrigation system must be listed by Underwriters Laboratories as acceptable for burial underground.

Electrical wiring that connects any electrical components of an irrigation system must be sized according to the manufacturer's recommendation. Electrical wire splices which may be exposed to moisture must be waterproof.

Underground electrical wiring that connects an automatic controller to any electrical component of the irrigation system must be buried with a minimum of twelve inches (12”) of select backfill.

Section 614.10.1 Non-Potable Water. Water contained within the piping of an irrigation system is deemed to be non-potable. No drinking or domestic water usage, such as, but not limited to, filling swimming pools or decorative fountains, shall be connected to an irrigation system.

A hose bib (an outdoor water faucet that has hose threads on the spout) is not permitted to be connected to an irrigation system for the purpose of providing supplemental water to an area.

Section 614.10.2 Labeling and Marking Non-Potable Water. Non potable distribution piping shall be purple in color and shall be embossed or integrally stamped or marked with words: “CAUTION: NONPOTABLE WATER – DO NOT DRINK” or the piping shall be installed with

a purple identification tape or wrap. Pipe identification shall be repeated at intervals not exceeding twenty-five (25) feet and at each point where the piping passed through a wall, floor or roof. Lettering shall be readily observable with the space where the piping is located.

Section 614.10.2.1 Color. The color of the pipe identification shall be discernable and consistent throughout the area. The color purple shall be used to identify the non-potable water.

Section 614.10.2.2 Identification Tape. Where used, identification tape shall be not less than three inches (3") wide and have white or black lettering on a purple field stating "CAUTION: NONPOTABLE WATER – DO NOT DRINK." Identification tape shall be installed on top of non-potable pipes and run continuously the entire length of the pipe.

Section 614.11 Irrigator On-Site. An irrigation technician shall be on-site at all times while the landscape irrigation system is being installed. When an irrigator is not onsite, the irrigator shall be responsible for ensuring that a licensed irrigation technician is on-site to supervise the installation of the irrigation system.

Section 614.12 Completion of Irrigation System Installation. Upon completion of the irrigation system, the irrigator or irrigation technician who provided supervision for the on-site installation shall be required to complete four items:

1. A final "walk through" with the irrigation system's owner or the owner's representative to explain the operation of the system;
2. The maintenance checklist on which the irrigator or irrigation technician shall obtain the signature of the irrigation system's owner or owner's representative and shall sign, date, and seal the checklist. If the irrigation system's owner or owner's representative is unwilling or unable to sign the maintenance checklist, the irrigator shall note the time and date of the refusal on the irrigation system's owner or owner's representative's signature line. The irrigation system owner or owner's representative will be given the original maintenance checklist and a duplicate copy of the maintenance checklist shall be maintained by the irrigator. The items on the maintenance checklist shall include but are not limited to:
 - (i.) the manufacturer's manual for the automatic controller, if the system is automatic;
 - (ii.) A seasonal (spring, summer, fall, winter) watering schedule based on either current/real time evapotranspiration or monthly historical reference

evapotranspiration (historical ET) data, monthly effective rainfall estimates, plant landscape coefficient factors, and site factors;

- (iii.) A list of components, such as the nozzle, or pump filters, and other such components; that require maintenance and the recommended frequency for the service; and
 - (iv.) The statement, "This irrigation system has been installed in accordance with all applicable state and local laws, ordinances, rules, regulations or orders. I have tested the system and determined that it has been installed according to the Irrigation Plan and is properly adjusted for the most efficient application of water at this time."
3. A permanent sticker which contains the irrigator's name, license number, company name, telephone number and the dates of the warranty period shall be affixed to each automatic controller installed by the irrigator or irrigation technician. If the irrigation system is manual, the sticker shall be affixed to the original maintenance checklist. The information contained on the sticker must be printed with waterproof ink.
 4. The irrigation plan indicating the actual installation of the system must be provided to the irrigation system's owner or owner representative.

Section 614.13 Duties and Responsibilities of City Irrigation Inspectors. The irrigation inspector shall enforce the ordinance of the city, and shall be responsible for:

1. Verifying that the appropriate permits have been obtained for an irrigation system and that the irrigator and installer or irrigation technician, if applicable, are licensed;
2. Inspecting the irrigation system;
3. Determining that the irrigation system complies with the requirements of this chapter;
4. Determining that the appropriate backflow prevention device was installed, tested, and test results provided to the city;
5. Investigating complaints related to irrigation system installation, maintenance, alteration, repairs, or service of an irrigation system and advertisement of irrigation services; and

6. Maintaining records according to this chapter.

Section P2914.14 Fees. Irrigation and Backflow device permit fees shall be established in the fee schedule approved by the city council.

Section 614.15 Irrigation System within the Public Right of Way or Public Roadway Easement. The City of Choctaw or the Choctaw Utilities Authority shall not be held liable for any damage of any system, which results from the installation or repair of, or improvement of any street or utility. Any homeowner or irrigator who installs a lawn sprinkler system between the curb and sidewalk or elsewhere within the public right of way or public roadway easement shall likewise hold the City of Choctaw and Choctaw Utilities Authority harmless against any claim or injury to persons or damage to property that any member of the public may suffer by reason of installation of said lawn sprinkling system within the public right of way.

Section 705.11.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied to all joint surfaces. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent-cement joints shall be permitted above or below ground.

~~Exception: A Primer is not required where both of the following conditions apply:~~

- ~~1. The solvent cement used is third party certified as conforming to ASTM D 2564.~~
- ~~2. The solvent cement is used only for joining PVC drain, waste and vent pipe and fittings in non pressure applications in sizes up to and including 4 inches (102 mm) in diameter.~~

Section 708.1.3 Building drain and building sewer junction. The junction of the building drain and the building sewer shall be served by a cleanout that is located at the junction or within ~~10 feet (3048 mm)~~ 12 feet (3658 mm) of the developed length of piping upstream of the junction. For the requirements of this section, the removal of the water closet shall not be required to provide cleanout access.

804.2 Special waste pipe, fittings, and components. Pipes, fittings, and components receiving or intended to receive the discharge of any fixture into which acid or corrosive chemicals are placed shall be constructed of CPVC, high silicone iron, PP, PVDF, chemical resistant glass, or glazed ceramic materials.

Section 903.1 Roof extension. Open vent pipes that extend through a roof shall be terminated not less than ~~[number] inches (mm)~~ 10 inches (254 mm) above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the ~~roof~~ finished occupiable surface within 10 feet (3048 mm) horizontal distance.

Section 903.1 Roof extension. Open vent pipes that extend through a roof shall terminate not less than six (6) inches (152 mm) above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.

Section 1003.4 Oil separators required. At repair garages where floor or trench drains are provided, car washing facilities, factories where oily and flammable liquid wastes are produced and hydraulic elevator pits, oil separators shall be installed into which oil-bearing, grease-bearing or flammable wastes shall be discharged before emptying into the building drainage system or other point of disposal.

Exceptions:

- (1) An oil separator is not required in hydraulic elevator pits where an approved alarm system is installed. Such alarm systems shall not terminate the operation of pumps utilized to maintain emergency operation of the elevator by fire fighters.
- (2) Oil separators shall not be required in a non-hydraulic elevator pit.

Section 1101.7 Roof design. Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. The maximum possible depth of water on the roof shall include the height of the water required above the inlet of the secondary roof drainage means to achieve the required flow rate of secondary drainage means to accommodate the design rainfall rate as required by ~~Section 1106~~ Section 1108.

Table 1108.1 Size of Secondary Scuppers. For a 10.2-inch per hour rate of rainfall. A table has been inserted with two columns, both with four rows beneath. The first column title is "Head in inches" and the second column title is "Horizontally Projected Roof Area (square feet) Length of Weir in inches". The second column should have seven sub-columns labeled 4, 6, 8, 12, 16, 20 and 24.

1. Below is the "Head in inches" column with the corresponding "Length of Weir in inches" for each of the sub-columns:
 - (i) Row 1. Head in inches, sub-column 4 is 112, sub-column 6 is 169, sub-column 8 is 226, subcolumn 12 is 339, sub-column 16 is 452, sub-column 20 is 565, and sub-column 24 is 678.
 - (ii) Row 2. Head in inches, sub-column 4 is 314, sub-column 6 is 471, sub-column 8 is 628, subcolumn 12 is 942, sub-column 16 is 1256, sub-column 20 is 1571, and sub-column 24 is 1885.
 - (iii) Row 3. Head in inches, sub-column 4 is 565, sub-column 6 is 848, sub-column 8 is 1130, subcolumn 12 is 1696, sub-column 16 is 2262, sub-column 20 is 2828, and sub-column 24 is 3393.
 - (iv) Row 4. Head in inches, sub-column 4 is 879, sub-column 6 is 1319, sub-column 8 is 1759, sub-

column 12 is 2637, sub-column 16 is 3519, sub-column 20 is 4399, and sub-column 24 is 5279.

2. Beneath the column the following should be added: For SI: 1 inch equals 25.4 mm. Notes: (i) To adjust this table for other than a 10.2-inch design rain fall rate multiply the square footage on the table by 10.2 then divide by the design rainfall rate.

(ii) This table does not apply to scuppers with a vertical opening height that is less than the head height. Example: For 4 inches of design rainfall rate, a 4-inch long scupper with a 1-inch head would accommodate 286 square feet. (112 times 10.2) divided by 4 equals 286.

HORIZONTALLY PROJECTED ROOF AREA (SQURE FEET)

Head in Inches	Length of Weir in Inches						
	4	6	8	12	16	20	24
1	112	169	226	339	452	565	678
2	314	471	628	942	1256	1571	1885
3	565	848	1130	1696	2262	2828	3393
4	879	1319	1759	2637	3519	4399	5279

For SI: 1 inch equals 25.4 mm.

Notes:

- (i) To adjust this table for other than a 10.2-inch design rain fall rate multiple the square footage on the table by 10.2 then divided by the design rainfall rate.
- (ii) This table does not apply to scuppers with a vertical opening height that is less than the head height. Example: For 4 inches of design rainfall rate, a 4-inch long scupper with a 1-inch head would accommodate 286 square feet (112 times 10.2) divided by 4 equals 286.

Section 1108.3 Sizing of secondary drains. Secondary (emergency) roof drain systems or scuppers shall be sized in accordance with ~~Section 1106~~ Section 1108 based on a the rainfall rate for which the primary system is sized of 10.2 inches per hour. In sizing secondary roof drain systems using Tables 1106.2, 1106.3 and 1106.6, the Horizontally Projected Roof Area shall be determined by dividing the Horizontally Projected Roof Area for 1-inch rain fall per hour rate by 10.2 inches per hour. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system or scuppers. Scuppers shall be sized in accordance with Table 1108.1 or by other national methods using the head height of water and flow rate of the scupper. ~~Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall have an opening dimension of not less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.~~

Section 1301.9.6 Overflow. The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table 606.5.4. The overflow pipe shall be protected from insects or vermin and shall discharge in a manner consistent with storm water runoff requirements of the jurisdiction. The overflow pipe shall discharge at a sufficient distance from the tank to avoid damaging the tank foundation or the adjacent property. Drainage from overflow pipes shall be directed to prevent freezing on roof walkways. The overflow drain shall not be equipped with a shutoff valve. A cleanout shall be provided on each overflow pipe in accordance with Section 708.

Amendment A-7

2015 International Fuel Gas Code

Part 5 – BUILDING REGULATIONS AND CODES

International Fuel Gas Code®, 2015 Edition (IFGC®, 2015)

Part 5, Chapter 7 “*International Fuel Gas Code*”

The following sections, paragraphs, and sentences of the *2015 International Fuel Gas Code* are hereby amended as follows: Standard type is text from the IFGC. Underlined type is text inserted. ~~Lined through type is deleted text from IFGC.~~

R101.1 Title. These regulations shall be known as the Fuel Gas Code of the City of Choctaw, hereinafter referred to as “this code”.

Section 106.1.1 Annual permit. ~~Instead of an individual construction permit for each alteration to an already approved system or equipment installation, the code official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.~~ An annual permit is a yearly permit which represents a group of individual permits for each alteration to an already existing electrical, gas, mechanical or plumbing installation. The building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

Section 106.1.2 Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The building official shall have access to such detailed records of alterations at all times. At the completion of the entity's annual permit term, the applicant shall file such detailed records of alterations with the building

official. Pursuant to the authority of 59 O.S. § 1000.25, the building official shall collect fees for each individual permit which is part of the annual permit once the detailed records are submitted and remit such fees to the OUBCC.

Section 202 General Definitions.

DISPENSING AREA. The appropriate hazardous (classified) locations for the fuel being dispensed in accordance with the National Electrical Code® – NFPA® 70.

MAIN RAILROAD TRACK. That part of the railway, exclusive of switch tracks, branches, yards, and terminals upon which trains are operated by timetable or train order or both.

[M] 306.3 Appliances in attics. Attics containing appliances shall be provided . . . *{bulk of paragraph unchanged}* . . . side of the *appliance*. The clear *access* opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), ~~and~~ or larger where such dimensions are not large enough to allow removal of the largest *appliance*. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

5. A permanent stair.
6. A pull down stair with a minimum 300 lb (136 kg) capacity.
7. An access door from an upper floor level.
8. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

1. The passageway and level service space are not required where the *appliance* is capable of being serviced and removed through the required opening.
2. Where the passageway is not less than . . . *{bulk of section to read the same}*.

[M] 306.5 Equipment and appliances on roofs or elevated structures. Where *equipment* requiring *access* or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access, ~~an~~ a permanent interior or exterior means of access shall be provided. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having

a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). ... *{bulk of section to read the same}*.

[M] 306.5.1 Sloped roofs. Where appliances, *equipment*, fans or other components that require service are installed on a roof having a slope of 3 units vertical in 12 units horizontal (25-percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which *access* is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*.

Section 306.6 Guards. ~~Guards shall be provided where various components that require service and roof hatch openings are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below~~ are located on a roof or elevated structure and have a condition as set forth in Sections 306.6.1 through 306.6.3. The top of the guard shall be located not less than 42 inches (1067 mm) above the elevated surface adjacent to the guard. The guard shall be constructed so as to prevent the passage of a 21-inch diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the International Building Code®. Guards shall be provide at new components when added or replaced on existing roof or elevated structure and have a condition as set forth in Sections 306.6.1 through 306.6.3.

Exception:

Guards are not required where permanent fall arrest-restraint anchorage connector devices that comply with ANSI/ASSE Z 359.1 are affixed for use during the entire lifetime of the roof covering. The devices shall be re-evaluated for possible replacement when the entire roof covering is replaced. The devices shall be placed not more than 10 feet (3048 mm) on center along hip and ridge lines and placed not less than 10 feet (3048 mm) from roof edges and the open sides of walking surfaces.

Section 306.6.1 Roof edge. Guards complying with 306.1 shall be provided when components are located within 10 feet (3048 mm) of a roof edge or open side of a walking surface or elevated structure and such edge or open side is located more than 30 inches (762 mm) above the floor, roof, or grade below. The guard shall extend not less than 30 inches (762 mm) beyond each end of the component that requires service.

Section 306.6.2 Skylights. Guards complying with Section 306.6 shall be provided when a skylight is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the skylight.

Exceptions:

1. Guards are not required when the skylight is located at least 42 inches (1067 mm) above the highest point of the walking surface adjacent to the skylight or component.
2. Guards are not required if some other provision for skylight fall-thru protection is provided and approved by the authority having jurisdiction.

Section 306.6.3 Roof hatch. Guards complying with Section 306.6 shall be provided when a roof hatch is within 10 feet (3048 mm) of the component that requires service. The guard shall extend 30 inches (762 mm) beyond the edge of the roof hatch. If the component is within 10 feet (3048 mm) of the ladder access side of the roof hatch, the guard shall incorporate a self-closing, selflatching gate. The gate shall have a top edge of not less than 42 inches (1067 mm) above the elevated surface adjacent to the gate and shall not allow the passage of a 21 inch (533 mm) sphere. If a roof hatch exists within 10 feet of a roof edge that is located more than 30 inches (762 mm) above the floor, roof or grade below and a new component that requires services on that existing roof or elevated structure, than a guard complying with Section 306.6 shall be added between the existing roof hatch and the roof edge.

Section 307.2.1 Condensate drains. Where condensing appliances are in locations subject to freezing conditions, the condensate drain line shall be protected from freezing in an approved manner and in accordance with manufacturer's installation instructions.

Section 310.1.1 CSST. Corrugated stainless steel (CSST) gas piping systems and piping systems containing one or more segments of CSST shall be bonded to the electrical service grounding electrode system or, where provided, the lightning protection grounding electrode system.

Exception:

Corrugated stainless steel gas piping or tubing products or systems that have been designed, manufactured and listed for installation without bonding to the grounding electrode system, shall be permitted to be installed in accordance with the manufacturer's installation instructions.

Section 401.2.1 Footing. An eight inch (8") deep solid footer must be placed within natural soil under the supporting legs of the liquefied petroleum gas storage. The footer must exceed a minimum of three inches (3") from the furthest point of the supporting leg of the liquefied petroleum gas storage.

Section 404.2.1 Identification. ... *{first paragraph of section to read the same}*

Both ends of each section of medium pressure gas piping shall identify its operating gas pressure with an *approved* tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:

"WARNING: 1/2 to 5 psi gas pressure - Do Not Remove"

Section 404.2.2 Sizing; add a third paragraph to read as follows:

Corrugated stainless steel tubing (CSST) shall be a minimum of 1/2" (18 EHD).

Section 404.3.1 is hereby added to read as follows:

Section 404.3.1 Residential gas meter location. Gas meters shall be located as required by the gas supplier.

Section 404.6.1 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 of horizontal separation of the different piping systems is maintained.

Section 404.12 Minimum burial depth. Underground piping systems shall be installed a minimum depth of ~~12 inches (305 mm)~~ 18 inches (457 mm) below grade, except as provided for in Section 404.12.1. Exception: Where a minimum depth of cover cannot be provided, the pipe shall be installed in conduit or bridged (shielded).

406.1 General. Prior to acceptance and initial operation, all piping installations shall be inspected and pressure tested to determine that the materials, design, fabrication, and installation practices comply with the requirements of this code. The permit holder shall make the applicable tests prescribed in Sections 406.1.1 through 406.1.5 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the piping system is ready for testing. The equipment, material, power and labor necessary for the inspections and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.

409.1.4 Valves in CSST installations. Shutoff valves installed with corrugated stainless steel (CSST) piping systems shall be supported with an *approved* termination fitting, or equivalent support, suitable for the size of the valves, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12-inches from the center of the valve. Supports shall be installed so as not to interfere with the free expansion and contraction of the system's piping, fittings, and valves between anchors. All valves and supports shall be designed and installed so they will not be disengaged by movement of the supporting piping.

Section 409.5.1 Located within the same room. The shutoff valve ...*{bulk of paragraph unchanged}*... in accordance with the appliance manufacturer's instructions. A secondary shutoff valve must be installed within 3 feet (914 mm) of the firebox if appliance shutoff is located in the firebox.

Section 401.5 Identification. ... *{first paragraph of section to read the same}*

Access to regulators shall comply with the requirements for access to appliances as specified in Section 306.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening.

Section [F] 412.5 Attendants. Motor fuel-dispensing operations shall be conducted by qualified attendants or in accordance with Section 412.9 by persons trained in the proper handling of LP-gas. Exception: When the dispensing equipment meets the guidelines of NFPA® 58 for "Low emission transfer" an attendant is not required.

Section [F] 412.6.1 Low emission transfer. [F] 412.6.1 Low emission transfer. When the dispensing equipment is installed in accordance with Section 6.28.5 of NFPA® 58 for "Low emission transfer," the transfer distance requirements in Table 6.5.2.1 and Section 6.25.4.3(1) of NFPA® 58 shall be reduced by one-half.

Section [F] 413.3.2 Warning signs. Warning signs complying with Section 310 of the International Fire Code® shall be posted as follows:

1. Warning sign(s) shall be conspicuously posted within sight of each dispenser in the fuel dispensing area and shall state the following:
 - (i.) No smoking
 - (ii.) Shut off motor
 - (iii.) Flammable Gas
 - (iv.) Natural gas vehicle fuel cylinders shall be inspected at intervals not exceeding 3 years or 36,000 miles to ensure safe operation of the vehicle
 - (v.) Natural gas fuel cylinders past their end-of-life date shall not be refueled and shall be removed from service.
2. A warning sign with the words "NO SMOKING, FLAMMABLE GAS" shall be posted in all compressor and storage areas.
3. The lettering on the sign shall be legible and large enough to be visible from each point of transfer.
4. The service pressure of each dispenser shall be posted in view of the operator.

Section [F] 413.5 Private fueling of motor vehicles. Self-service CNG-dispensing systems, including key, code and card lock dispensing systems, shall be limited to the filling of approved, permanently mounted fuel containers on CNG-powered vehicles.

In addition to the requirements in the International Fire Code, the owner of a self-service CNG- dispensing facility shall ensure the safe operation of the system ~~and the training of users.~~

Section [F] 413.8 Emergency shutdown control. ~~An emergency shutdown device shall be located within 75 feet (22 860 mm) of, but not less than 25 feet (7620 mm) from, dispensers and shall also be provided in the compressor area. A remote and local emergency manual shutdown device shall be provided.~~ Upon activation, the emergency shutdown system shall automatically shut off the power supply to the compressor and close valves between the main gas supply and the compressor and between the storage containers and dispensers, and automatically shut off the power supply to the compressor and the following associated devices: dispensing enclosures; remote pumps; power, control, and signal circuits; and electrical equipment in the hazardous (classified) locations surrounding the fuel dispensing enclosures. All labeled emergency shutdown devices shall be interconnected, whether required or not. Resetting from an emergency shutoff condition shall require manual intervention and the manner of resetting shall be approved by the Authority Having Jurisdiction. Exception: In time-fill applications, in lieu of a defined remote and local emergency manual shutdown device, an emergency manual shutdown device shall be provided within 50 feet (15 240 mm) of each fixed point of dispensing hose attachment and located inside and outside the compressor area within 10 feet (3048 mm) of the main access to the compressor area.

Section 413.8.1 Remote emergency shutdown device. A remote emergency manual shutdown device shall be located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from all dispensing enclosures and shall be provided inside and outside the compressor area within 10 feet (3048 mm) of the main access to the compressor area. Exception: A remote emergency manual shutdown device may be located greater than 100 feet (30 480 mm) from one or more dispensing enclosures when within line of sight of the dispensing enclosures and approved by the Authority Having Jurisdiction.

Section 413.8.2 Local emergency shutdown device. A local emergency manual shutdown device shall be located within 15 feet (4572 mm) of each dispensing enclosure.

Amendment A-8

{Reserved}

Amendment A-9
{Reserved}

Amendment A-10
{Reserved}

Amendment A-11
2015 International Residential Code

Part 5 – BUILDING REGULATIONS AND CODES

International Residential Code®, 2015 Edition (IRC®, 2015)

Part 5, Chapter 11 “*International Residential Code*”

The following sections, paragraphs, and sentences of the *2015 International Residential Code* are hereby amended as follows: Standard type is text from the IRC. Underlined type is text inserted. ~~Lined-through type is deleted text from IRC.~~

R102.4 Referenced codes and standards. These provisions shall be known as the Residential Code for *One- and Two- family Dwellings* of the City of Choctaw, and shall be cited as such and will be referred to herein as “this code”.

R102.4 Referenced codes and standards. The *codes*, when specifically adopted, and standards referenced in this *code* shall be considered part of the requirements of this *code* to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2. Whenever amendments have been adopted to the referenced *codes* and standards, each reference to said *code* and standard shall be considered to reference the amendments as well. Any reference made to NFPA 70 or the *Electrical Code* shall mean the *Electrical Code* as adopted.

R104.10.1 Flood hazard areas. The *building official* shall ~~not grant modifications to any provisions required in~~ reference Part 18, Chapter 2 of the City of Choctaw Code of Ordinances for flood hazard areas as established by Federal Emergency Management Agency, Table 301.2(1) unless a determination has been made that:

~~R105.3.1.1 Determination of substantially improved or substantially damaged existing buildings in flood hazard areas.~~ Reference City of Choctaw Code of Ordinance Part 18,

Chapter 2.

Section R202 – Definitions;

[RB] ACCESSORY STRUCTURE. A structure not greater than 3,000 square feet (279 m²) in floor area, and not over two stories in height, that is accessory to and incidental to that of the dwelling(s) and that is located on the same lot.

BUILDING DRAIN. ~~The lowest piping that collects the discharge from all other drainage piping inside the house and extends 30 inches (762 mm) in developed length of pipe beyond the exterior walls and conveys the drainage to the building sewer.~~ That part of the lowest piping of a drainage system that receives the discharge from soil, waste, and other drainage pipes inside and that extends 5 feet (1524 mm) in developed length of pipe beyond the exterior walls of the building and conveys the drainage to the building sewer.

HABITABLE SPACE. A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage, outdoor kitchens, or utility spaces and similar areas are not considered *habitable space*.

KITCHEN. Kitchen shall mean an area used, or designated to be used, for the preparation or cooking of food inside the dwelling. The presents or design layout of having a refrigerator, sink, and stove or range shall be considered as a kitchen. Does not apply to outdoor kitchens.

NATIONALLY RECOGNIZED TESTING LABORATORY. A testing facility given this designation from the United States Occupational Safety and Health Administration (OSHA) that provides product safety testing and certification services to manufacturers.

OUTDOOR KITCHEN. An open air area separate from the habitable space that is used for the preparation or cooking of food outside in an unconditioned space typically on a porch area, patio, terrace or in the side or back yard.

SAFE ROOM. A building or structure or portions thereof, constructed in accordance with ICC/NSSA Standard for the design and construction of Storm Shelters®, (ICC 500®), and constructed to provide near-absolute protection for its occupants from severe wind storm events such as tornados or hurricanes.

3. Community safe room. A safe room designed and constructed in accordance with the Federal Emergency Management Agency (FEMA) document P-361 entitled "Design and Construction Guidance for Community Safe Rooms® (FEMA P-361®), intended to provide life-safety protection for more than 16 persons.

4. Other Safe Room. A safe room designed and constructed in accordance with FEMAP-361® "Design and Construction Guidance for Community Safe Rooms" or FEMA P-320® entitled "Taking Shelter from the Storm: Building a Safe Room for your Home or Small Business®," located in a residence or non-residential building or structure, intended to provide life-safety protection for 16 persons or less

[RE] SLEEPING UNIT. See ~~Section N1101.6~~ Chapter 2 of the 2015 International Building Code for definition applicable in Chapter 11.

STORM SHELTER. A building, structure, or portions thereof, constructed in accordance with ICC 500® and designated for use during a severe wind storm event such as a hurricane or tornado.

1. Community storm shelter. A storm shelter not defined as a "Residential storm shelter."
2. Residential storm shelter. A storm shelter serving occupants of dwelling units and having an occupant load not exceeding 16 persons.

TOWNHOUSE. A single-family dwelling unit constructed in a group of three or more attached units separated by property lines in which each unit extends from foundation to roof and with a yard or public way on at least two sides.

Table 301.2(1) – The table has been modified to read:

TABLE R301.2(1) – CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM		
	Speed (mph)	Topographic effects	Special Wind Region	Wind-borne debris zone		Weathering	Frost Line Depth	Termite
10 lb/ft ²	115 Vmph	NO	NO	NO	B	Moderate	18"	Slight to Moderate
WINTER DESIGN TEMP		ICE BARRIER UNDERLAYMENT REQUIRED		FLOOD HAZARDS		AIR FREEZING INDEX		MEAN ANNUAL TEMP
13		NO		FEMA NFIP ID# 400357 – Dec. 18, 09		1500		60 °F

Section R302.1; add exception #6 to read as follows:

Exceptions: {previous exceptions unchanged}

6. Open non-combustible carport structures may be constructed when also approved within adopted ordinances.

Table 302.1(1) –The table has been modified to read:

Table R302.1(1) Exterior Walls has been modified to change most of the requirements in the column entitled "Minimum Fire Separation Distance" and to delete certain sub-rows under the column "Exterior Wall Element". The table description with modifications, is listed below:

TABLE R302.1(1) - EXTERIOR WALLS

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCES
Walls	Fire-resistance rated	1 hour - tested in accordance with ASTM E119 or UL 263 with exposure from both sides	< 3 feet
Walls	Not fire-resistance rated	0 hours	≥ 3 feet
Projections	Fire-resistance rated	1 hour on the underside ^{a,b}	< 3 feet
Projections	Not fire-resistance rated	0 hours	≥ 3 feet
Openings in Walls	Not allowed	N/A	< 3 feet
Openings in Walls	Unlimited	0 hours	≥ 3 feet
Penetrations	All	Comply with Section R302.4	< 3 feet
Penetrations	All	None required	≥ 3 feet

For SI: 1 foot = 304.8 mm

N/A = Not Applicable.

- a. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave if fire blocking is provided from the wall top plate to the underside of the roof sheathing.
- b. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave provided that gable vent openings are not installed.

Table 302.1(2) –The table has been modified to read:

Table R302.1(2) Exterior Walls – Dwellings with Fire Sprinklers. This table has been modified to strike certain sub-rows underneath the column "Exterior Wall Element." The table description with modifications is listed below:

TABLE R302.1(2) - EXTERIOR WALLS - DWELLINGS WITH FIRE SPRINKLERS

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCES
Walls	Fire-resistance rated	1 hour - tested in accordance with ASTM E119 or UL 263 with exposure from both sides	0 feet
Walls	Not fire-resistance rated	0 hours	3 feet ^a
Projections	Fire-resistance rated	1 hour on the underside ^{b,c}	2 feet ^a
Projections	Not fire-resistance rated	0 hours	3 feet

Openings in Walls	Not allowed	N/A	< 3 feet
Openings in Walls	Unlimited	0 hours	3 feet ^a
Penetrations	All	Comply with Section R302.4	< 3 feet
Penetrations	All	None required	3 feet ^a

For SI: 1 foot = 304.8 mm

N/A = Not Applicable.

- a. For residential subdivisions where all dwellings are equipped throughout with an automatic sprinkler system installed in accordance with Section P2904, the fire separation distance for nonrated exterior walls and rated projections shall be permitted to be reduced to 0 feet, and unlimited unprotected openings and penetrations shall be permitted, where the adjoining lot provides an open setback yard that is 6 feet or more in width on the opposite side of the property line.
- b. The roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave if fireblocking is provided from the wall top plate to the underside of the roof sheathing.
- c. The roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave provided that gable vent openings are not installed.

R303.1 Habitable rooms. This section has been modified to read:

Section R303.1 Habitable rooms. 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, skylights, 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 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 ~~a whole-house~~ an approved mechanical ventilation system is installed in accordance with Section M1507 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) per occupant on the basis of two occupants for the first bedroom and one occupant for each additional bedroom.
2. The glazed areas need not be installed in rooms where Exception 1 is satisfied and artificial light is provided that is capable of producing an average illumination of 6 footcandles (65 lux) over the area of the room at a height of 30 inches (762 mm) above the floor level.
3. Use of sunroom 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.

Section R311.1 Means of egress. Dwellings and garages (attached or detached from the dwelling) shall be provided with a means of egress in accordance with this section. The means of egress shall provide a continuous and unobstructed path of vertical and horizontal egress travel from all portions of the *dwelling* to the required egress door without ~~requiring travel~~ traveling

through a garage. The means of egress from the garage may travel through the adjacent dwelling. The required egress door shall open directly into a public way or to a *yard* or court that opens to a public way.

Section R311.2 Egress door. Not less than one egress door shall be provided for each dwelling unit and garage. The egress door shall be side-hinged, and shall provide a clear width of not less than 32 inches (813 mm) where measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The clear height of the door opening shall not be less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily openable from the inside of the dwelling or garage without the use of a key or special knowledge or effort.

Section R311.7.5.1 Risers. The riser height shall be not more than 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). Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted provided that the openings located more than 30 inches (762 mm), as measured vertically, to the floor or grade below do not permit the passage of a 4-inch-diameter (102 mm) sphere.

Exceptions:

1. The openings between adjacent treads is not limited on spiral stairways.
2. The riser height of spiral stairways shall be in accordance with Section R311.7.10.1.
3. The top and bottom riser in each flight of stairs may vary by 3/4 inch (19 mm).

Section R313.2 One- and two-family dwellings automatic fire systems. ~~An automatic residential fire sprinkler system shall be installed in one and two family dwellings.~~

~~Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential sprinkler system.~~ If one chooses to install an automatic residential fire sprinkler please refer to the State of Oklahoma adoption 748 Uniform Building Code Commission and the section is entitled, "Appendix V" and is renumbered to become V101.1.

Section R313.2.1 Design and installation. ~~Automatic residential fire sprinkler systems shall be designed and installed in accordance with Section P2904 or NFPA 13D.~~ If one chooses to install an automatic residential fire sprinkler please refer to the State of Oklahoma adoption 748 Uniform Building Code Commission and the section is entitled, "Appendix V" and is renumbered to become V101.2.

Section R314.2.2 Alterations, repairs and additions. Where *alterations, repairs, or additions* requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, the individual *dwelling unit* shall be equipped with smoke alarms located as required for new *dwellings*.

Exceptions:

1. Work involving the exterior surfaces of *dwellings*, such as the replacement of roofing or siding, the *addition* or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.
2. Installation, alteration, or repairs of electrical, plumbing or mechanical systems are exempt from the requirements of this section.

Section R315.2.2 Alterations, repairs and additions. Where alterations, repairs, or additions requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with carbon monoxide alarms located as required for new dwellings.

Exceptions:

1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, the addition or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.
2. Installation, alteration, or repairs of electrical, plumbing or mechanical systems are exempt from the requirements of this section.

Section R323.1 General. This section applies to ~~storm shelters where constructed as separate detached buildings or where constructed as safe rooms within buildings for the purpose of providing refuge from storms that produce high winds, such as tornados and hurricanes~~ the construction of above or below ground storm shelters and safe rooms constructed as separate detached buildings rooms within buildings, structures, or portions thereof for the purpose of providing safe refuge from storms that produce high winds, such as tornados. Any room or structure, as may be used as a place of refuge during a severe wind storm event, shall not be defined as a storm shelter or safe room unless specifically designed to the requirements listed in Section R323. In addition to other applicable requirements in this code, storm shelters shall be constructed in accordance with the following: ICC/NSSA 500.

R323.2 Definitions. R323.2 Definitions. The following definitions are defined in Chapter 2 of this code:

1. SAFE ROOM
 - 1.1. Community safe room.
 - 1.2. Other safe room.

2. STORM SHELTER

- 2.1. Community storm shelter.
- 2.2. Residential storm shelter.

Section R326.1 General. ~~The design and construction of pools and spas shall comply with the *International Swimming Pool and Spa Code*.~~ Residential swimming pools, spas, and hot tubs requiring a permit shall comply with Sections R326.2 through R326.4.

Section R326.2 Enclosure. Swimming pools shall be completely enclosed by a fence or barrier not less than 4 feet (1219 mm) in height or a screen enclosure. Openings in the fence or barrier shall not permit the passage of a 4-inch-diameter (102 mm) sphere.

Exceptions:

- 1. A swimming pool with a power safety cover or a spa with a safety cover complying with ASTM F 1346 need not comply with this section.

Section R326.3 Gates. Exterior pedestrian access doors or gates shall be self-closing and have a self-latching device. Doors or gates other than pedestrian access doors or gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the door or gate, the release mechanism shall be located on the pool side of the door or gate, 3 inches (76 mm) or more below the top of the door or gate, and the door or gate and barrier shall be without openings greater than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

Exception: Gates equipped with a locking device.

R326.4 Entrapment avoidance. Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

Section R401.2. Requirements. *{existing text unchanged}* ... Every foundation and/or footing, or any size addition to an existing post-tension foundation, regulated by this code shall be designed and sealed by an Oklahoma registered engineer.

Section R402.2 Concrete. Concrete shall have a minimum specified compressive strength of f'_c , as shown in Table R402.2. Concrete subject to moderate or severe weathering as indicated in Table R301.2 (1) shall be air entrained as specified in Table R402.2. The maximum weight of fly ash, other pozzolans, silica fume, slag or blended cements that is included in concrete mixtures for garage floor slabs and for exterior porches, carport slabs, and steps that will be exposed to deicing chemicals shall not exceed the percentages of the total weight of the cementitious materials specified in Section 19.3.3.4 of ACI 318. Materials used to produce concrete testing thereof shall comply with the applicable standards listed in Chapters 19 and 20 of ACI 318 or ACI 332.

Exception:

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

Figure R403.1 (1) PLAIN CONCRETE FOOTINGS WITH MASONRY AND CONCRETE STEM WALLS IN SDC A, B AND C. The "Notes" at the bottom of the figure have been amended to read:

(1) Figure R403.1(1)

- a. See Section 404.3 for sill requirements.
- b. See Section 403.1.6 for sill attachment.
- c. See Section R506.2.3 for vapor barrier requirements.
- d. See Section R403.1 for base.
- e. See Figure R403.1.3 for additional footing requirements for structures in SDC D0, D1, and D2 and townhouses in SDC C.
- f. See Section R408 for under-floor ventilation and access requirements.
- g. Add two number four (4) rebar to all footings. Additionally all cold joints between footings and foundation walls (stem walls) shall be tied together by a number four (4) rebar at every corner and not to exceed 6 feet (1828 mm) o.c. with embedment of 12inches (304 mm) into each footing and wall.

Section R403.1.6 Foundation anchorage. Wood sill plates and wood walls supported directly on continuous foundations shall be anchored to the foundation in accordance with this section.

Cold formed steel framing shall be anchored directly to the foundation or fastened to wood sill plates anchored to the foundation. Anchorage of cold-formed steel framing shall be in accordance with this section and Section R505.3.1 or R603.3.1.

Wood sole plates at the exterior walls on monolithic slabs, wood sole plates of braced wall panels at building interiors on monolithic slabs and all wood sill plates shall be anchored to the foundation with minimum 1/2-inch-diameter (12.7 mm) anchor bolts spaced a maximum of 6 feet (1829 mm) on center or approved anchors or anchor straps spaced as required to provide equivalent anchorage to 1/2-inch-diameter (12.7 mm) anchor bolts. Bolts shall extend a minimum of 7 inches (178 mm) into concrete or grouted cells of concrete masonry units. The bolts shall be located in the middle third of the width of the plate. A nut and washer shall be tightened on each anchor bolt. There shall be a minimum of two bolts per plate section with one bolt located not more than 12inches (305 mm) or less than seven bolt diameters from each end of the plate section. Interior bearing wall sole plates ~~on monolithic slab foundation~~ that are not part of a braced wall panel shall be positively anchored with approved fasteners. Hand driven cut or concrete nails are not approved fasteners. Sill plates and sole plates shall be protected against decay and termites where required by Section R317 and R318.

Exceptions:

1. Walls 24 inches (610 mm) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with a minimum of one anchor bolt located in the center third of the plate section and shall be attached to adjacent braced wall panels at corners as shown in Item 9 of Table R602.3(1).
2. Connection of walls 12 inches (305 mm) total length or shorter connecting offset braced wall panels to the foundation without anchor bolts shall be permitted. The wall shall be attached at corners as shown in Item 9 of Table R602.3(1).
3. 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 R403.1.9. Protection of footings: Trenching for work including but not limited to plumbing, electrical, storm shelters, and pools shall comply with this section. Trenching installed parallel to footings and walls shall not extend into the bearing plane of a footing wall. The upper boundary of the bearing plane is a line that extends downward, at an angle of 45 degrees from horizontal, from the outside bottom edge of the footing wall.

Section R406.2 Concrete and masonry foundation waterproofing. In areas where a high water table or other severe soil-water conditions are known to exist, exterior foundation walls that retain earth and enclose interior spaces and floors below grade shall be water proofed from the higher of (a) the top of the footing or (b) 6 inches (152 mm) below the top of the basement floor, to the finished grade. Walls shall be waterproofed in accordance with one of the following:

1. Two-ply hot-mopped felts.
2. Fifty-five-pound (25 kg) roll roofing.
3. Six-mil (0.15 mm) polyvinyl chloride.
4. Six-mil (0.15 mm) polyethylene.
5. Forty-mil (1 mm) polymer-modified asphalt.
6. Sixty-mil (1.5 mm) flexible polymer cement.
7. One-eighth-inch (3 mm) cement-based, fiber-reinforced waterproof coating.
8. Sixty-mil (1.5 mm) solvent-free liquid-applied synthetic rubber.
9. Bentonite.

Exception: Organic-solvent-based products such as hydrocarbons, chlorinated hydrocarbons, ketones and esters shall not be used for ICF walls with expanded polystyrene form material. Use of plastic roofing cements, acrylic coatings, latex coatings, mortars, and pargings to seal ICF walls is permitted. Cold-setting asphalt or hot asphalt shall conform to Type C of ASTM D 449. Hot asphalt shall be applied at a temperature of less than 200 degrees Fahrenheit (93 degrees Celsius).

All joints in membrane waterproofing shall be lapped and sealed with an adhesive compatible with the membrane.

Section R506.2.1 Fill. Fill material shall be free of vegetation and foreign material. The fill shall be compacted in 8 to 12 inch (203 mm to 305 mm) lifts to ensure uniform support of the slab, and except where approved, the fill depths shall not exceed ~~24 inches (610 mm)~~ 48 inches (1220 mm) for clean sand or gravel and 8 inches (203 mm) for earth.

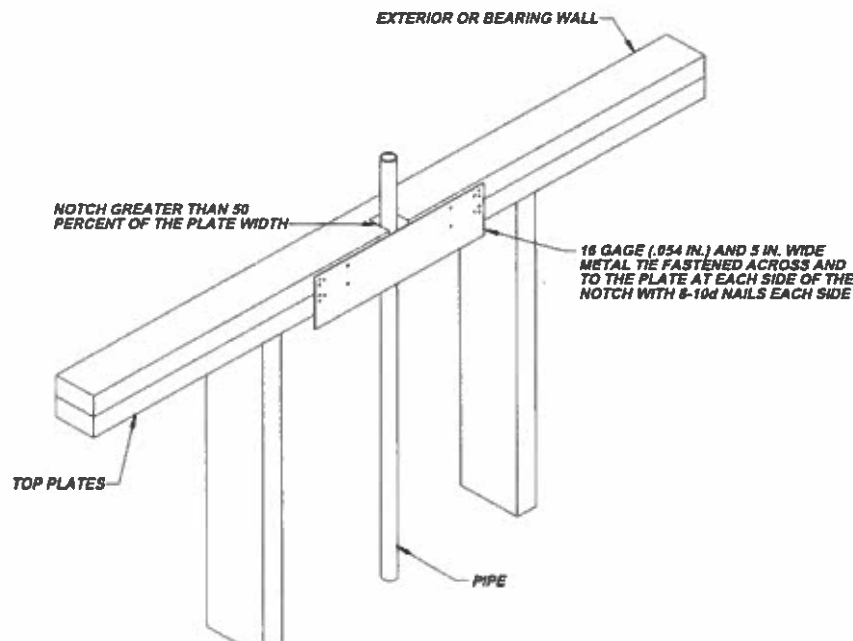
Section R506.2.3 Vapor retarder. A 6 mil (0.006 inch; 152 micrometers) polyethylene sheeting, other industry accepted vapor retarder products installed per manufacturer specifications or approved vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where no base course exists.

Exception: The vapor retarder is not required for the following:

1. Garages, utility buildings and other unheated accessory structures.
2. For unheated storage rooms having an area less than 70 square feet (6.5 square meters) and carports.
3. Driveways, walks, patios and other flatwork not likely to be enclosed and heated at a later date.
4. Where approved by the building official, based on local site conditions.

R602.6.1 Drilling and notching of top plate. When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of the top plate by more than 50 percent of its width, a galvanized metal tie not less than 0.054 inch thick (1.37 mm) (16 Ga) and ~~1 1/2 inches (38) mm~~ 5 inches (127 mm) wide shall be fastened across and to the plate at each side of the opening with not less than eight 10d (0.148 inch diameter) having a minimum length of 1 1/2 inches (38 mm) at each side or equivalent. Fasteners will be offset to prevent splitting of the top plate material. The metal tie must extend a minimum of 6 inches past the opening. See figure R602.6.1. {remainder unchanged}

*Figure
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insert the
figure:*



*R602.6.1;
figure and
following*

Section R602.10.5 Minimum length of a braced wall panel. The minimum length of a braced wall panel shall comply with Table R602.10.5. For methods CS-WSP and CS-SFB, the minimum panel length shall be based on the adjacent clear opening height in accordance with Table R602.10.5 and Figure R602.10.5. Where a panel has an opening on either side of differing heights, the taller opening height shall be used to determine the panel length. For method CS-PF, it is permissible to begin the portal frame at 12 1/2 feet (3810 mm) from the wall line end.

Section R602.10.8 Braced wall panel connections. Braced wall panels shall be connected to the floor framing or foundations as follows:

1. Where joists are perpendicular to a braced wall panel above or below, a rim joist, band joist or blocking shall be provided along the entire length of the braced wall panel in accordance with Figure R602.10.8(1). Fastening of top and bottom wall plates to framing, rim joist, band joist and/or blocking shall be in accordance with Table R602.3(1).
2. Where joists are parallel to a braced wall panel above or below, a rim joist, end joist or other parallel framing member shall be provided directly above and below the braced wall panel in accordance with Figure R602.10.8(2). Where a parallel framing member cannot be located directly above and below the panel, full-depth blocking at 16-inches (406 mm) spacing shall be provided between parallel framing members to each side of the braced wall panel in accordance with figure R602.10.8(2). Fastening of blocking and wall plates shall be in accordance with Table R602.3 (1) and Figure R602.10.8 (2).
3. Connections of braced wall panels to concrete or masonry shall be in accordance with Section R403.1.6.
4. Wood sole plates of braced wall panels at building interiors on monolithic slabs maybe 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 (1829 mm).

Section R602.12 Simplified wall bracing Buildings meeting all of the conditions listed below shall be permitted to be braced in accordance with this section as an alternate to the requirements of Section R602.10. The entire building shall be braced in accordance with this section; the use of other bracing provisions of Section R602.10, except as specified herein, shall not be permitted.

1. There shall be not more than three stories above the top of a concrete or masonry foundation or basement wall. Permanent wood foundations shall not be permitted.
2. Floors shall not cantilever more than 24 inches (~~607 mm~~) (610 mm) beyond the foundation or bearing wall below.
3. Wall height shall not be greater than ~~10 feet (3048 mm)~~ 12 feet (3658 mm).
4. The building shall have a roof eave-to-ridge height of ~~15 feet (4572 mm)~~ 20 feet (6096 mm) or less.
5. Exterior walls shall have gypsum board with a minimum thickness of 1/2 inch (12.7mm) installed on the interior side fastened in accordance with Table R702.3.5.
6. The structure shall be located where the ultimate design wind speed is less than or equal to ~~130 mph (58 m/s)~~ 115 mph (51.4 m/s), and the exposure category is B or C.
7. The structure shall be located in Seismic Design Category A, B, or C for detached one- and two-family dwellings or Seismic Design Category A or B for townhouses.

Section R602.12.2 Sheathing materials. The following sheathing materials installed on the exterior side of exterior walls shall be used to construct a bracing unit as defined in Section R602.12.3. Mixing materials is prohibited.

1. Wood structural panels with a minimum thickness of ~~3/8 inch (9.5 mm)~~ 7/16 inch (11.11 mm) fastened in accordance with Table R602.3(3).
2. Structural fiberboard sheathing with a minimum thickness of 1/2 inch (12.7 mm) fastened in accordance with Table R602.3(1).

Figure R703.8 Typical Masonry Veneer Wall Details. This figure has been modified to add footnotes "f" and "g" to the footnote section and amend the figure heading to include a superscript "f" and "g" to indicate the associated footnotes. This figure's footnotes have been modified to read:

- a. See Sections R703.8.5, R703.8.6, and R703.4.
- b. See Section R703.2 and R703.8.4.
- c. See Section R703.8.4.2 and Table R703.8.4.
- d. See Section R703.8.3.
- e. Figure R703.8 illustrates typical construction details for a masonry veneer wall. For the actual mandatory requirements of this code, see the indicated sections of text. Other details of masonry veneer wall construction shall be permitted provided the requirements of the indicated sections of text are met.

- f. Flashing to be done per Section R703.4, in accordance with a design from a registered design professional or in accordance with other approved methods or standard industry practices.
- g. Flashing depicted under sill and above windows are not required with windows that have nailing flanges for their primary attachment. Flange type windows should be counter flashed into the weather resistant barrier or installed per Section R703.4.

Figure R703.8.2.1 Exterior Masonry Veneer Support by Steel Angles.

- a. Flashing to be done per Section R703.4, in accordance with a design from a registered design professional or in accordance with other approved methods or standard industry practices.

Figure R703.8.2.2 Exterior Masonry Veneer Support by Roof Members.

- a. Flashing to be done per Section R703.4, in accordance with a design from a registered design professional or in accordance with other approved methods or standard industry practices.

Section R703.8.3.1 Allowable span. The allowable span shall not exceed the values set forth in Table R703.8.3.1. Additionally a 3 inches x 3 inches x 3/16 inch (76 mm x 76 mm x 4.8 mm) steel angle 6 feet (1829 mm) long may be used to support 3 vertical feet (914 mm) of masonry veneer and a 3 inches x 3 inches x 3/16 inch (76 mm x 76 mm x 4.8 mm) steel angle 5 feet (1524 mm) long may be used to support 4 1/4 vertical feet (1295 mm) of masonry veneer.

Section R703.8.4.1 Size and spacing. Veneer ties, if strand wire shall be not less in thickness than No. 9 U.S. gage [(0.148 inch) (4mm)] wire and shall have a hook embedded in the mortar joint, or if sheet metal, shall be not less than No. 22 U.S. gage by [(0.0299 inch) (0.76 mm)] 7/8 inch (22 mm) corrugated. Each tie shall support not more than 2.67 square feet (0.25 m²) of wall area and shall be spaced not more than 32 inches (813 mm) on center horizontally and 24 inches (635 mm) on center vertically.

In stud framed exterior walls, all ties shall be anchored to studs as follows:

1. When studs are 16 in (407 mm) o.c., stud ties shall be spaced no further apart than 24 in (737 mm) vertically starting approximately 12 in (381 mm) from the foundation; or
2. When studs are 24 in (610 mm) o.c., stud ties shall be spaced no further apart than 16 in (483 mm) vertically starting approximately 8 in (254 mm) from the foundation.

Exception verbiage is unchanged

Section R802.3 Framing details. ~~Rafters shall be framed not more than 1 ½ inches (38 mm) offset from each other to ridge board or directly opposite from each other with the gusset plate as a tie. Ridge board shall be not less than 1-inch (25mm) nominal thickness and not less in depth than the cut end of the rafter. At valley 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. 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. Rafters shall be framed to ridge board or to each other with a gusset plate as a tie. Ridge board shall be either at least 1-inch (25 mm) nominal thickness and not less in depth than the cut end of the rafter or at least 2-inches (51 mm) nominal thickness and one size greater than the rafters attached to it.~~

Where a 1-inch (25 mm) nominal thickness ridge is used, all rafters shall be framed not more than 1.5 inches (38 mm) offset from each other at the ridge board or if no ridge is used they should be framed directly opposite from each other with a gusset plate as a tie. When a nominal 2-inch rafter is used they may be offset with no limitations. 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 beam 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.

Section R802.3 Framing details. (Exception) This exception shall be added to read:

Exception: 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 R802.3.1 Ceiling joist and rafter connections. Ceiling joists and rafters shall be nailed to each other every 4 feet (1219 mm) on center in accordance with Table R802.5.1(9), and the rafter shall be nailed to the top wall plate in accordance with Table R602.3(1). Ceiling joists shall be continuously or securely joined in accordance with Table R802.5.1(9) where they meet over interior partitions and are nailed to adjacent rafters to provide a continuous tie across the building where such joists are parallel to the rafters.

Where ceiling joists are not connected to the rafters at the top wall plate, joists connected higher in the attic shall be installed as rafter ties, or rafter ties shall be installed to provide a continuous tie. Where ceiling joists are not parallel to rafters, the rafter ties shall be installed every 4 feet (1219 mm) on center. Rafter ties shall be not less than 2 inches by 4 inches (51 mm by 102 mm) (nominal), installed in accordance with the connection requirements in Table R802.5.1(9), or connections of equivalent capacities shall be provided. Where ceiling joists or rafter ties are not provided, the ridge formed by these rafters shall be supported by a wall, beam, or girder designed in accordance with accepted engineering practice constructed in accordance with this code.

Collar ties or ridge straps to resist wind uplift shall be connected in the upper third of the attic space in accordance with Table R602.3 (1).

Collar ties shall be not less than 1 inch by 4 inches (25 mm by 102 mm) (nominal), spaced not more than 4 feet (1219 mm) on center.

Section R802.5 Allowable rafter spans. Spans for rafters shall be in accordance with Tables R802.5.1 (1) through R802.5.1 (8). For other grades and species and for other loading conditions, refer to the AWC STJR. The span of each rafter shall be measured along the horizontal projection of the rafter. The tabulated rafter spans in Tables R802.5.1(1) through R802.5.1(8) assume ceiling joists are located at the bottom of the attic space or some other method of resisting the outward push of the rafters on the bearing walls, such as rafter ties is provided at that location. Where ceiling joists or rafter ties are located higher in the attic space, the rafter spans in these tables shall be multiplied by the following rafter reduction factors: Where ceiling joists or rafter ties are located at one third the span of the rafter the adjustment factor is 0.67, at one quarter of the span of the rafter the adjustment factor is 0.76, at one fifth of the span of the rafter the adjustment factor is 0.83 , at one sixth of the span of the rafter, the adjustment factor is 0.90 and at two fifteenths of the rafter or less, there is no need for adjusting the rafter capacity. Exception: Collar Ties. Installation of collar ties to reduce the span of the rafters is permitted as shown in Figure R802.5.1. Collar ties shall be sized not less than the required size of the rafters they are connected to.

Section R802.5.1 Purlins. Installation of purlins to reduce the span of rafters is permitted as shown in Figure R802.5.1. Purlins shall be sized not less than the required size of the rafters that they support. Purlins shall be continuous and shall be supported by 2-inch by 4-inch (51 mm by 102 mm) braces installed to bearing walls at a slope not less than 45 degrees (0.79 rad) from the horizontal. The braces shall be spaced not more than 4 feet (1219 mm) on center and the unbraced length of the braces shall not exceed 8 feet (2438 mm).

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).

R902.1 Roofing covering materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. Class A, B, or C roofing shall be installed ~~in areas designated by law as requiring their use or when the edge of the roof is less than 3 feet from a lot line.~~ *{remainder unchanged}*

Exceptions:

1. *{text unchanged}*
2. *{text unchanged}*
3. *{text unchanged}*
4. *{text unchanged}*
5. Non-classified roof coverings shall be permitted on 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.

Section R905.2.1 Sheathing requirements. Asphalt shingles shall be fastened to solidly sheathed decks in accordance with Section R803 or to the asphalt shingles manufacturer's installation instructions.

Section R908.3.1.1 Roof re-cover. A roof re-cover shall not be permitted where any of the following conditions occur:

1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
2. Where the existing roof covering is slate, clay, cement or asbestos-cement tile.
3. Where the existing roof has two or more applications of any type of roof covering.
4. Where the existing roof has one or more application of asphalt shingles additional applications of asphalt shingles shall not be permitted.

Section R1005.7 Factory-built chimney offsets. Where a factory-built chimney assembly incorporates offsets, no part of the chimney shall be at an angle of more than 30 degrees (0.52 rad) from vertical at any point in the assembly and the chimney assembly shall not include more than four elbows.

Exception:

Where chimneys are part of a listed and labeled factory-built fireplace they may be installed in accordance with the fireplace and chimney manufacturer's installation instructions.

N1101.1 Scope. This chapter regulates the energy efficiency for the design and construction of buildings regulated by this code.

Exception:

Portions of the building envelope that do not enclose conditioned space.

Section N1101.4 (R102.1.1) Above code programs. The building official or other authority having jurisdiction shall be permitted to deem a national, state, or local energy-efficiency program to exceed the energy efficiency required by this chapter. Buildings approved in writing by such an energy-efficiency program shall be considered in compliance with this ~~code~~ chapter. ~~The requirements identified as "mandatory" in this chapter, as applicable, shall be met.~~

Section N1101.10.1 (R303.1.1) Building thermal envelope insulation. An R-value identification mark shall be applied by the manufacturer to each piece of building thermal envelope insulation 12 inches (305 mm) or ~~greater in width~~ more wide. Alternately, the insulation installers shall provide a certification listing the type, manufacturer and R-value of the insulation installed in each element of the building thermal envelope. For blown or sprayed insulation (fiberglass and cellulose), the initial installed thickness, settled thickness, settled R-value, installed density, coverage area and number of bags installed shall be listed on the certification. ~~For insulated siding, the R-value shall be labeled on the product's package and shall be listed on the certification.~~ For sprayed polyurethane foam (SPF) insulation, the installed thickness of the area covered and R-value of installed thickness shall be listed on the certificate. The insulation installer shall sign, date and post the certificate in a conspicuous location on the job site.

Section N1101.10.3 (R303.1.3) Fenestration product rating. U-factors of fenestration products (windows, doors, and skylights) shall be determined in accordance with NFRC 100 by an accredited, independent laboratory, and labeled and certified by the manufacturer.

Products lacking such a labeled U-factor shall be assigned a default U-factor from Table N1101.10.3 (1) or N1101.10.3 (2). The solar heat gain coefficient (SHGC) of glazed fenestration products (windows, glazed doors and skylights) shall be determined in accordance with NFRC 200 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled SHGC shall be assigned a default SHGC from ~~Table 1103.10.3(3).~~ Table 1101.10.3(3).

Section N1101.10.4 (R303.1.4) Insulation product rating: The thermal resistance (R-value) of insulation shall be determined in accordance with the ~~U.S. Federal Trade Commission R-value rule~~ CFR Title 16, Part 460 in units of h x square foot x Fahrenheit/BTU at a mean temperature of 75 degrees Fahrenheit (24 degrees Celsius).

Section N1101.11 (R303.2). Installation: All materials, systems and equipment shall be installed in accordance with the manufacturer's instructions and the provisions of this code.

Section N1101.13 (R401.2) Compliance. ~~Projects shall comply with one of the following:~~

- ~~1) Sections N1101.14 through N1104,~~
- ~~2) Section N1105 and the provisions of Sections N1101.14 through N1104 labeled "Mandatory,"~~
- ~~3) An energy rating index (ERI) approach in Section N1106.~~

Compliance shall be demonstrated by either meeting the requirements of the 2009 International Energy Conservation Code® or meeting the requirements of this chapter. Climate zones from figure N1101.7 or Table 1101.7 shall be used in determining the applicable requirements from this chapter.

Section N1101.14 (R401.3) Certificate (Mandatory). This section has been renumbered in Appendix W to become W101.1.

Section N1102.1 (R402.1) General (Prescriptive). This section, including the exception has been stricken from the code.

Section N1102.1.1 (R402.1.1) Vapor retarder. This section has been stricken from the code.

Section N1102.1.3 (R402.1.3) R-value computation. Insulation material used in layers, such as framing cavity insulation, ~~or continuous insulation~~ and insulation sheathing, shall be summed to compute the component R-value. The manufacturer's settled R-value shall be used for blown insulation. Computed R-values shall not include an R-value for other building materials or air films. ~~Where insulated siding is used for the purpose of complying with the continuous insulation requirements of Table N1102.1.2, the manufacturer's labeled R-value for insulated siding shall be reduced by R-0.6.~~

Table N1102.1.2 Insulation and fenestration requirements by component. At the end of the table heading is a superscript "a" and a superscript "m" to indicate associated footnotes.

The table description with modifications, is listed below:

1. The table has eight rows with eleven columns. The first row is a header with the following header columns: Climate zone, Fenestration U-factor (with a superscript "b" to indicate a footnote), Skylight U-factor (with a superscript "b" to indicate a footnote), Glazed Fenestration SHGC (with the subscript "b" and "e" footnote indications stricken), Ceiling R-value, Wood Frame Wall R-value, Mass Wall R-value (with a superscript "i" to indicate a footnote), Floor R-value, Basement Wall R-value (with a superscript "c" to indicate a footnote), Slab R-

value and depth (with a superscript "d" to indicate a footnote), and Crawl space wall R-value (with a superscript "c" to indicate a footnote).

2. The second and third rows, entitled "1" and "2" under the first column header "Climate zone" and continuing across all column headings have been stricken from the table.
3. The fourth row, entitled "3" under the first column header "Climate zone" has been modified in specific column headers listed below:
 - (i.) Under column header "Fenestration U-factor," the requirement has been changed from "0.35" to "0.40" with a superscript "i" to indicate an associated footnote.
 - (ii.) Under column header "Glazed Fenestration SHGC," the requirement has been changed from "0.25" to "0.35" with superscript letters "e" and "j" added to indicate associated footnotes.
 - (iii.) Under column header "Ceiling R-value," the requirement has been changed from "38" to "30."
 - (iv.) Under column header "Wood frame wall R-value," the requirement has been changed from "20 or 13 + 5h" to "13."
 - (v.) Under the column header "Slab R-Value and Depth" a superscript "l" has been added to indicate an associated footnote.
4. The fifth row, entitled "4 except Marine" under the first column header "Climate zone" has been modified in specific columns headers listed below:
 - (i.) Under column header "Skylight U-factor," the requirement has been changed from "0.55" to "0.60."
 - (ii.) Under column header "Glazed Fenestration SHGC," the requirement has been changed from "0.40" to "NR."
 - (iii.) Under column header "Ceiling R-value," the requirement has been changed from "49" to "38."
 - (iv.) Under column header "Wood frame Wall R-value," the requirement has been changed from "20 or 13 +5h" to "13."
 - (v.) Under column header "Mass wall R-value" the requirement has been changed from "8/13" to "5/10."
5. The sixth, seventh, and eighth rows, entitled "5 and Marine 4", "6," and "7 and 8" respectively, under the first column heading "Climate zone" and continuing across all column headings have been stricken from the table.

6. Footnote "a." has been modified to read: R-values are minimums. U-factors and SHGC are maximums, R-19 batts compressed into nominal 2 x 6 framing cavity such that the R-Value is reduced by R-1 or more shall be marked with the compressed R-Value in addition to the full thickness R-value.
7. Footnote "b." has been modified to read: The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
8. Footnote "c." has been modified to read: The first R-value applies to continuous insulation, the second to framing cavity insulation; either insulation meets the requirement.
9. Footnote "d." R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less, in zones 1 through 3 for heated slabs.
10. Footnote "e." There are no SHGC requirements in the Marine Zone.
11. Footnote "f." Basement wall insulation is not required in warm-humid locations as defined by Figure N1101.7 and Table N1101.7.
12. Footnote "g." Or insulation sufficient to fill the framing cavity, R-19 minimum.
13. Footnote "h." has been modified to read: "13 + 5" means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, R-5 sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25 percent of the exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.
14. Footnote "i." has been modified to read: For impact-rated fenestration complying with Section R301.2.1.2, the maximum U-factor shall be 0.75 in zone 2 and 0.65 in zone 3.
15. A new footnote "j." has been added to read: For impact-resistant fenestration complying with Section R301.2.1.2 of the 2015 International Residential Code®, the maximum SHGC shall be 0.40.
16. The previously labeled footnote "i." has been renamed to "k." and has been modified to read as follows: The second R-value applies when more than half the insulation is on the interior.
17. A new footnote "l" has been added to read: If foundation/slab insulation is used and slab ledge exists 1/2 inch insulation in Vertical position is allowed as thermal

break between slab edge and foundation wall so that slab can still bear on horizontal ledge. (R) A new footnote "m" has been added to read: In addition to the requirements in Table N1102.1.2, one of the following improvements are required:

- (i.) Fenestration U Factors to be 0.35.
- (ii.) Wood Frame Wall R-Value to be R15.
- (iii.) Slab R-Value and Depth to be 5.2 feet.
- (iv.) Ceiling R-Value to be R38.
- (v.) Exception: If duct testing is performed and passed in accordance with N1103.3.2 by either the post-construction test or rough-in test no further upgrade is required from the values in Table N1102.1.2.

SAMPLE: TABLE N1102.1.2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT

CLIMATE ZONE	FENESTRATION UFACTOR ^a	SKYLIGHT U-FACTOR ^b	GLAZED FENESTRATION SHGC	CEILING RVALUE	WOOD FRAME WALL RVALUE	MASS WALL RVALUE ⁱ	FLOOR RVALUE	BASEMENT ^c WALL R-VALUE	SLAB ^d R-VALUE & DEPTH	CRAWL SPACE ^e WALL RVALUE
3	0.40 ^f	0.55	0.35 ^{g,1}	30	13	8/13	19	5/13 ^f	0 ^f	5/13
4 except Marine	0.35	0.60	NR	38	13	5/10	19	10/13	10, 2 ft	10/13

- a. R-values are minimums. U-factors and SHGC are maximums, R-19 batts compressed into nominal 2 x 6 framing cavity such that the R-Value is reduced by R-1 or more shall be marked with compressed R-Value in addition to the full thickness R-value. b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
- c. The first R-value applies to continuous insulation, the second to framing cavity insulation; either insulation meets the requirement.
- d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less, in zones 1 through 3 for heated slabs.
- e. There are no SHGC requirements in the Marine Zone.
- f. Basement wall insulation is not required in warm-humid locations defined by Figure N1101.7 and Table N1101.7.
- g. Or insulation sufficient to fill the framing cavity, R-19 minimum.
- h. 13 +5 means R-13 cavity insulation plus R-5 insulated sheathing. If structural sheathing covers 25 percent or less of the exterior, R-5 sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25 percent of the exterior, structurally sheathing shall be supplemented with insulated sheathing of at least R-2.
- i. For impact-rated fenestration complying with Section R301.2.1.2., the maximum U-factor shall be 0.75 in zone 2 and 0.65 in zone 3.
- j. For impact-resistant fenestration complying with Section R301.2.1.2. of the 2015 International Residential Code, the maximum SHGC shall be 0.40.
- k. The second R-value applies when more than half the insulation is on the interior.
- l. If foundation/slab insulation is used and slab ledge exists 1/2 inch insulation in Vertical position is allowed as thermal break between slab edge and foundation wall so that slab can still bear on the horizontal ledge.
- m. In addition to the requirements in Table N1102.1.2, one of the following improvements are required: Fenestration U-factors to be 0.35; Wood Frame Wall R-value to be R15; Slab R-value and Depth to be 5.2 feet; Ceiling R-value to be R38. Exception: If duct testing is performed and passed in accordance with N1103.3.2 by either the post-construction test or rough-in test no further upgrade is required from the values in Table N1102.1.2.

Table N1102.1.4 Equivalent U-factors. At the end of the table heading is a superscript "a" to indicate an associated footnote.

The table description with modifications, is listed below:

1. The table has eight rows with nine columns. The first row is a header with the following header columns: Climate zone, Fenestration U-factor, Skylight U-factor, Ceiling U-factor, Frame Wall U-factor, Mass Wall U-factor (with a superscript "b" to indicate an associated footnote), Floor U-factor, Basement Wall U-factor, and "Crawl Space Wall U-factor."
2. The second and third rows, entitled "1" and "2" under the column heading "Climate Zone" and continuing across all column headings, have been stricken from the code.
3. The fourth row, entitled "3" under the column heading "Climate Zone" has been modified in the subsequent columns as listed below:
 - (i) Under column heading "Fenestration U-factor" the requirement has been changed from "0.35" to "0.50."
 - (ii) Under column heading "Skylight U-factor" the requirement has been changed from "0.55" to "0.65."
 - (iii) Under column heading "Ceiling U-factor" the requirement has been changed from "0.030" to "0.035."
 - (iv) Under column heading "Frame Wall U-factor" the requirement has been changed from "0.060" to "0.082."
 - (v) Under column heading "Mass Wall U-factor" the requirement has been changed from "0.098" to "0.141."
4. The fifth row, entitled "4 except Marine" under the column heading "Climate Zone" has been modified in the subsequent columns as listed below:
 - (i) Under column heading "Skylight U-factor" the requirement has been changed from "0.55" to "0.60."
 - (ii) Under the column heading "Ceiling U-factor" the requirement has been changed from "0.026" to "0.030."
 - (iii) Under the column heading "Frame Wall U-factor" the requirement has been changed from "0.060" to "0.082."
 - (iv) Under the column heading "Mass Wall U-factor" the requirement has been changed from "0.098" to "0.141."
5. The sixth, seventh, and eighth rows, entitled "5 and Marine 4", "6", and "7 and 8" respectively, under column heading "Climate zone" and continuing across all subsequent columns, have been stricken from the table.
6. Footnote "a" reads as: Nonfenestration U-factors shall be obtained from measurements, calculation or an approved source.

7. Footnote "b" has been modified to read: When more than half the insulation is on the interior, the mass wall U-factors shall be a maximum of 0.17 in Zone 1, 0.14 in Zone 2, 0.12 in Zone 3, 0.10 in Zone 4 except Marine, and the same as the frame wall U-factor in marine Zone 4 and in Zones 5 through 8.
8. Footnote "c." has been modified to read: Basement wall U-factor of 0.360 in warm- humid locations as defined by Figure N1101.7 and Table N1101.7.

SAMPLE: TABLE N1102.1.4 Equivalent U-Factors^a

CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING U-FACTOR	FRAME WALL UFACTOR	MASS WALL UFACTOR ^b	FLOOR U-FACTOR	BASEMENT WALL UFACTOR	CRAWL SPACE WALL UFACTOR
3	0.50	0.65	0.035	0.082	0.141	0.064	0.360	0.477
4 except Marine	0.35	0.60	0.030	0.082	0.141	0.047	0.059	0.065

- a. Nonfenstration U-factors shall be obtained from measurements, calculation or an approved source.
- b. When more than half the insulation is on the interior, the mass wall U-factors shall be a maximum of 0.17 in Zone 1, 0.14 in Zone 2, 0.12 in Zone 3, 0.10 in Zone 4 except Marine, and the same as all the frame wall U-factor in Marine Zone 4 and Zones 5 through 8.
- c. Basement wall U-factor Of 0.360 in warm-humid locations as defined by Figure N1101.7 and Table N1101.7.

Section N1102.2.1 (R402.2.1) Ceilings with attic spaces. Where Section N1102.1.2 would require R-38 in the ceiling, ~~installing R-30 over 100 percent of the ceiling area requiring insulation shall be deemed to satisfy the requirement for R-38 wherever the full height of uncompressed R-30 insulation extends over the wall top plate at the eaves. Similarly, where Section R1102.1.2 would require R-49 insulation in the ceiling, installing R-38 over 100 percent of the ceiling are requiring insulation shall be deemed to satisfy the requirement for R-49 insulation wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves. This reduction shall not apply to the U-factor alternative approach in Section R1102.1.4 and the total UA alternative in Section R1102.1.5.~~

Section N1102.2.2 (R402.2.2) Ceilings without attic spaces. Where Section N1102.1.2 would require insulation levels above R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-30. This reduction of insulation from the requirements of Section N1102.1.2 shall be limited to 500 square feet (46 square meters) or 20 percent of the total insulated ceiling area, whichever is less. ~~This reduction shall not apply to the U-facto alternative approach in Section N1102.1.4 and the total UA alternative in Section N1102.1.5.~~ Where Section N1102.1 would require insulation level R-30 and the design of the roof/ceiling assembly does not allow sufficient space for the required insulation, the minimum required insulation for such roof/ceiling assemblies shall be R-19. This reduction of insulation from the requirements of Section N1102.1 shall be limited to 500 square feet (46 square meters) or 20 percent of the total insulated ceiling area, whichever is less.

Section N1102.2.4 (R402.2.4) Access hatches and doors. Access doors from conditioned spaces to unconditioned spaces such as attics and crawl spaces shall be weatherstripped and insulated to a level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood-framed or equivalent baffle or retainer is required to be provided when loose-fill insulation is installed, the purpose of which is to prevent the loose-fill insulation from spilling into the living space when the attic is opened, and to provide a permanent means of maintaining the installed R-value of the loose-fill insulation.

~~**Exception:** Vertical doors that provide access from conditioned to unconditioned spaces shall be permitted to meet the fenestration requirements of Table R1102.1.2 based on the applicable climate zone specified in Chapter 3~~

Section N1102.2.5 (R402.2.5) Mass walls. Mass walls for the purposes of this chapter shall be considered above-grade walls of concrete block, concrete, insulated concrete form (ICF), masonry cavity, brick (other than brick veneer), earth (adobe, compressed earth block, rammed earth) and solid timber/logs, ~~or any other walls having a heat capacity greater than or equal to 6 Btu/ft² x °F (123 Kj/M² x k).~~

Section N1102.2.6 (R402.2.6) Steel-frame ceilings, walls, and floors. Steel-frame ceilings, walls, and floors shall meet the insulation requirements of Table N1102.2.6 or shall meet the U-factor requirements of Table N1102.1.4. The calculation of the U-factor for a steel-frame envelope assembly shall use a series-parallel path calculation method. Exception: In climate zones 1 and 2, the continuous insulation requirements in the Table N1102.2.6 shall be permitted to be reduced to R-3 for steel frame wall assemblies with studs spaced at 24 inches (610 mm) on center.

Section N1102.2.7 (R402.2.7) Walls with partial structural sheathing. This section has been stricken from the code.

Section N1102.2.8 (R402.2.8) Floors. Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of the subfloor decking.

~~**Exception:** The floor framing cavity insulation shall be permitted to be in contact with the topside of the sheathing or continuous insulation installed on the bottom side of floor framing where combined with insulation that meets or exceeds the minimum wood frame wall R-value in Table 1102.1.2 and that extends from the bottom to the top of all perimeter floor framing members.~~

Section N1102.2.9 (R402.2.9) Basement walls. Exterior walls associated with conditioned basements shall be insulated from the top of the basement wall down to 10 feet (3048 mm) below grade or to the basement floor, whichever is less. Walls associated with unconditioned basements shall meet this requirement unless the floor overhead is insulated in accordance with Sections N1102.1.2 and N1102.2.8.

Table N1102.2.6 (R402.2.6) Steel-frame ceiling, wall and floor insulation (R-value).

The table heading has been modified to read: Table N1102.2.6 Steel-frame ceiling, wall and floor insulation (R-value).

The table description with modifications, is listed below:

1. The table has two columns and 23 rows. The first row contains the column headings: Wood frame R-value requirement and Cold-formed steel equivalent R-value (with a superscript "a" to indicate an associated footnote). The table is divided into five subcategories:
 - (i) Steel Truss ceilings (with a superscript "b" to indicate an associated footnote). Under this sub heading there are three rows for values R-30, R-38, and R49. No modifications have been made to this sub-category.
 - (ii) Steel Joist Ceilings (with a superscript "b" to indicate an associated footnote). Under this subheading there are two rows for values R-30 and R-38. No modifications have been made to sub-category.
 - (iii) Steel Frame Wall, 16 inches on center. This subheading has been modified to strike the "16 inches on center" portion of the heading. Under the subheading there are five rows for R-values that have been further modified. See section (B) for those modifications.
 - (iv) Steel Frame Wall, 24 inches on center. This subheading has been modified to strike the "24 inches on center" portion of the heading and to delete all the requirements in this sub-category.
 - (v) Steel Joist Floor. Under this subheading there are two rows for R-values R-13 and R-19. Both rows have been modified. See section (C) for those modifications.

2. Steel Frame Wall modifications. This subsection has five rows that have been modified.
 - (i) Row "R-13." This row has been modified to strike the associated items under the column entitled "Cold-formed steel equivalents" and replace them with: R-13 + 5 or R-15 +4 or R-21 + 3 or R-0 +10.
 - (ii) Row "R-13 +3." This row has been stricken from the table.
 - (iii) Row "R- 20." This row title and the associated items under the column entitled "Cold-formed steel equivalents" have been stricken from the table and replaced with the row title "R-19" and with the associated items under the column entitled "Coldformed steel equivalents" as R-13 +9 or R-19 +8 or R-25 +7.
 - (iv) Row "R-20 +5." This row has been stricken from the table.
 - (v) Row "R-21" This row has been modified to strike the associated items under the column entitled "Cold-formed steel equivalents" and replace them with R-13 +10 or R-19 + 9 or R-25 + 8.

3. Steel Joist Floor. This subsection has two rows which have been modified as follows:

- (i) Row "R-13." The associated items under the column entitled "Cold-formed steel equivalents" have been modified to read: R-19 in 2 x 6, R-19 + R-6 in 2 x 8 or 2 x 10.
- (ii) Row "R-19." The associated items under the column entitled "Cold-formed steel equivalents" have been modified to read: R-19 + R-6 in 2 x 6, or R-19 + R-12 in 2 x 8 or 2 x 10.

SAMPLE: TABLE N1102.2.6 STEEL-FRAME CEILING, WALL AND FLOOR INSULATION (R-VALUE).

a. Cavity insulation R-value is listed first, followed by continuous insulation R-value.

WOOD FRAME R-VALUE REQUIREMENT	COLD-FORMED STEEL EQUIVALENT R-VALUE ^a
Steel Truss Ceilings ^b	
R-30	R-38 or R-30 + 3 or R-26 +5
R-38	R-49 or R-38 +3
R-49	R-38 +5
Steel Joist Ceilings ^b	
R-30	R-38 in 2 x 4 or 2 x 6 or 2 x 8; R-49 in any framing
R-38	R-49 in 2 x 4 or 2 x 6 or 2 x 8 or 2 x 10
Steel Frame Wall	
R-13	R-13 + 5 or R-15 + 4 or R-21 +3 or R-0 +10
R-19	R-13 + 9 or R-19 + 8 or R-25 + 7
R-21	R-13 + 10 or R-19 + 9 or R-25 + 8
Steel Joist Floor	
R-13	R-19 in 2 x 6, R-19 +R-6 in 2 x 8 or 2 x 10
R-19	R-19 + R-6 in 2 x 6 or R-19 + R-12 in 2 x 8 or 2 x 10

b. Insulation exceeding the height of framing shall cover the framing.

(Reason: This table has been modified to bring it into alignment with the corresponding table in the 2009 IRC® by striking a portion of the table heading (R402.2.6), and by editing specific rows.)

Section N1102.2.13 (R402.2.13) Sunroom insulation. ~~Sunrooms enclosing conditioned spaces shall meet the insulation requirements of this code:~~ The minimum ceiling insulation R-values shall be R-19 in Zones 1 through 4 and R-24 in Zones 5 through 8. The minimum wall R-value

shall be R-13 in all zones. New walls separating the sunroom from the conditioned space shall meet the building thermal envelope requirements.

~~Exception: For sunrooms with thermal isolation, and enclosing conditioned spaces, the following exceptions to the insulation requirements of this code shall apply:~~

~~1) R-19 in Zones 1 through 4 and R-24 in Zones 5 through 8.~~

~~2) The minimum wall R-value shall be R-13 in all climate zones. Walls separating a sunroom with a thermal isolation from conditioned space shall meet the building thermal envelope requirements of this code.~~

Section N1102.3.2 Glazed fenestration SHGC. An area-weighted average of fenestration products more than 50-percent glazed shall be permitted to satisfy the solar heat gain coefficient (SHGC) requirements.

~~Dynamic glazing shall be permitted to satisfy the SHGC requirements of Table 1102.1.2 provided the ratio of the higher to lower labeled SHGC is greater than or equal to 2.4, and the dynamic glazing is automatically controlled to modulate the amount of solar gain into the space in multiple steps. Dynamic glazing shall be considered separately from other fenestration, and area-weighted averaging with other fenestration that is not dynamic glazing shall not be permitted.~~

~~**Exception:** Dynamic glazing is not required to comply with this section when both the lower and higher labeled SHGC already comply with the requirements of Table N1102.1.2~~

Section N1102.3.5 (R402.3.5) Sunroom fenestration. ~~Sunrooms enclosing conditioned spaces shall meet the fenestration requirements of this code:~~ For zones 4 through 8, the maximum fenestration U-factor shall be 0.50 and the maximum skylight U-factor shall be 0.75. New windows and doors separating the sunroom from conditioned space shall meet the building thermal envelope requirements.

~~**Exception:** For sunrooms with thermal isolation and enclosing conditioned space in Climate Zones 2 through 8, the maximum fenestration U-factor shall be 0.45 and the maximum skylight U-factor shall be 0.70.~~

~~New fenestration separating the sunroom with thermal isolation from conditioned space shall meet the building thermal envelope requirements of this code.~~

Section N1102.3.6 Replacement fenestration. Where some or all of an existing fenestration unit is replaced with a new fenestration product, including sash and glazing, the replacement

fenestration unit shall meet the applicable requirements for U-factor and solar heat gain coefficient (SHGC) in Table N1102.1.2.

Section N1102.4.1 (R402.4.1) Building thermal envelope. ~~The building thermal envelope shall comply with Sections N1102.4.1.1 and N1102.3.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contraction be durably sealed to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. The following shall be caulked, gasketed, weather-stripped or otherwise sealed with an air barrier material, suitable film or solid material.~~

1. All joints seams and penetrations.
2. Site-built windows, doors and skylights.
3. Openings between window and door assemblies and their respective jambs and framing.
4. Utility penetrations.
5. Dropped ceilings or chases adjacent to the thermal envelope.
6. Knee walls.
7. Walls and ceilings separating the garage from conditioned spaces.
8. Behind tubs and showers on exterior walls.
9. Common walls between dwelling units.
10. Attic access openings.
11. Rim joists junction.
12. Other sources of infiltration.

Section N1102.4.1.1 (R402.4.1.1) Installation. ~~The components of the building thermal envelope as listed in Table N1102.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table N1102.4.1.1, as applicable to the method of construction. Where required by the building official, an approved third party shall inspect all components and verify compliance. Building envelope air tightness and insulation installation shall be demonstrated to comply with one of the following options given by Sections N1102.4.1.2 or N1102.4.1.3.~~

Section N1102.4.1.2 (R402.4.1.2) Testing. ~~The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding five air changes per hour in Climate Zone 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Testing shall be conducted in accordance with ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.~~

During testing:

- ~~1. Exterior windows and doors, fireplace and stove ... control measures.~~
- ~~2. Dampers including exhaust, intake ... control measures.~~
- ~~3. Interior doors, if installed ... shall be open.~~
- ~~4. Exterior doors for continuous ... closed and sealed.~~
- ~~5. Heating and cooling systems ... shall be turned off.~~
- ~~6. Supply and return registers ... shall be fully open.~~

Tested air leakage rate is less than 7 ACH when tested with a blower door at a pressure of 50 Pascals (0.007 psi). Testing shall occur after rough in and after installation of penetrations of the building envelope including penetrations for utilities, plumbing, electrical, ventilation and combustion appliances. During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed;
2. Dampers shall be closed, but not sealed; including exhaust, intake, makeup air, back draft and flu dampers;
3. Interior doors shall be open;
4. Exterior openings for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
5. Heating and cooling system(s) shall be turned off;
6. HVAC ducts shall not be sealed; and
7. Supply and return registers, shall not be sealed.

Section N1102.4.1.3 Visual Inspection has been added to the code. This section has been added to read: N1102.4.1.3 Visual Inspection. The items listed in Table N1102.4.1.1 applicable to the method of construction, are field verified. Where required by the code official, an approved party independent from the installer of the insulation or contractor, shall inspect the air barrier and insulation. Where no approved party inspects these items the air barrier components shall be viewed as a part of the frame inspection or insulation inspection by the Authority Having Jurisdiction.

Section N1102.4.2. (R402.4.2) Fireplaces. New wood-burning fireplaces shall have tight fitting flue dampers or doors, and outdoor combustion air. Where using tight fitting doors on factory built fireplaces listed and labeled in accordance with UL 127, the doors shall be tested and listed for the fireplace. Where using tight fitting doors on masonry fireplaces, the doors shall be listed and labeled in accordance with UL 907.

Table N1102.4.1.1 (R402.1.1) Air barrier and insulation installation. The table has been modified to read:

The first row contains the column headings: "Component", "Air Barrier Criteria" and "Insulation Installation Criteria." The table description with modifications, is listed below:

1. In Row 1, the second column, entitled "Air Barrier Criteria" has been modified to strike the words "Air Barrier" and is now entitled "Criteria."
2. In Row 1, the third column, entitled "Insulation Installation Criteria" has been stricken from the table. All corresponding content in all remaining sixteen rows has been stricken.
3. The following modifications have been made to Row 2:
 - (i) In the first column, entitled "Component" the wording "General requirements" has been stricken and replaced with: Air barrier and thermal barrier.
 - (ii) In the second column, entitled "Criteria" the wording "A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed" has been stricken and replaced with the following: Exterior thermal envelope insulation for framed walls is installed in substantial contact and continuous alignment with the building envelope air barrier. Breaks or joints in the air barrier are filled or repaired. Air-permeable insulation is not used as a sealing material. Air-permeable insulation is inside of an air barrier.
4. The following modifications have been made to Row 3:
 - (i) In the second column entitled, "Criteria," in the first sentence the words "The air", "shall be" and "in the air barrier" have been has been stricken and the sentence has been modified to read: Air barrier in any dropped ceiling/soffit substantially aligned with insulation and any gaps are sealed.
 - (ii) The second sentence "Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed" has been stricken and replaced with the following: Attic access (except unvented attic), knee wall door, or drop down door stair is sealed.
5. The following modification has been made to Row 4: In the second column, entitled "Criteria," the wording "The junction of the foundation sill plate shall be sealed. The junction of the top plate and the top of the exterior walls shall be sealed. Knee walls shall be sealed," has been stricken and replaced with the following: "Corners and headers are insulated. Junction of foundation and sill plate is sealed."
6. The following modifications have been made to Row 5:
 - (i) In the first column, entitled "Component" the word "skylights" has been stricken.
The wording now reads: Windows and doors.

(ii) In the second column, entitled "Criteria," the words "and skylights and framing shall be" have been stricken. The word "are" has been added to the wording. The section has been modified to read: The space between window/door jambs and framing are sealed.

7. The following modification has been made to Row 6: In the second column entitled, "Criteria" the words "shall" and "the" have been stricken and the wording "are insulated and" has been added. The section has been modified to read: Rim joists are insulated and include an air barrier.
8. The following modification has been made to Row 7: In the second column entitled, "Criteria" the words "The," "shall be" and "insulation" have been stricken and the words "Insulation is installed to maintain permanent contact with the underside of subfloor decking," "is" and "floor" have been added. The section has been modified to read: Insulation is installed to maintain permanent contact with the underside of subfloor decking. Air barrier is installed at any exposed edge of floor.
9. The following modification has been made to Row 8: In the second column entitled, "Criteria" the wording "shall be" has been stricken and the words "Insulation is permanently attached to walls" and "is" have been added. The section has been modified to read: Insulation is permanently attached to walls. Exposed earth in unvented crawl spaces is covered with a Class I vapor retarder with overlapping joints taped.
10. The following modification has been made to Row 9: In the second column entitled, "Criteria" the wording "shall be" has been stricken. The wording "knee walls" and "are" have been added. The section has been modified to read: Duct shafts, utility penetrations, knee walls and flue shafts opening to exterior or unconditioned space are sealed. (K) The following modification has been made to Row 10 modifications are as follows: In the second column entitled "Criteria" the wording "Batts in narrow cavities are cut to fit, or narrow cavities are filled by sprayed/blown insulation," has been added. Previously the section was blank. This section has been modified to read: Batts in narrow cavities are cut to fit, or narrow cavities are filled by sprayed/blown insulation. (L) The following modification has been made to Row 11: In the second column entitled, "Criteria" the wording "shall be" has been stricken and replaced with the wording "is." The section has been modified to read: Air sealing is provided between the garage and conditioned space.

11. The following modifications have been made to Row 12:

- (i) In the second column entitled, "Criteria" the wording "installed in the building thermal envelope shall be" has been stricken and replaced with "are air tight, IC rated and." The first sentence has been modified to read: Recessed light fixtures are airtight, IC rated and sealed to the drywall.
- (ii) In the second column entitled, "Criteria" an exception has been added to read: Exception: Fixtures in conditioned space.

12. The following modification has been made to Row 13: In the second column entitled, "Criteria" the wording "Insulation is placed between outside and pipes. Batt insulation is cut to fit around wiring and plumbing or sprayed/blown insulation extends behind piping and wiring" has been added to the previously blank section. The section has been modified to read: Insulation is placed between outside and pipes. Batt insulation is cut to fit around wiring and plumbing or sprayed/blown insulation extends behind piping and wiring.

13. The following modification has been made to Row

14. In the second column entitled, "Criteria" the wording "The air barrier installed at exterior walls adjacent to" and "shall separate them from the showers and tubs" has been stricken. The wording "on exterior walls have insulation and an air barrier separating them from the exterior wall" have been added. The section has been modified to read: Showers and tubs on exterior walls have insulation and an air barrier separating them from the exterior wall.

15. The following modification has been made to Row 15: In the second column entitled, "Criteria" the wording "The," "shall be installed" and "electrical or communication" has been stricken. The wording "extends," "type" and "are" have been added. The section has been revised to read: Air barrier extends behind boxes or air-sealed boxes are installed.

16. The following modifications have been made to Row 16: A new row has been added to the table. The added information is listed below:

- (i) In the first row entitled, "Component" the wording "Common Wall" has been added. The section has been added to read: Common Wall.
- (ii) In the second row entitled, "Component" the wording "Air barrier is installed in common wall between dwelling units" has been added. The section has been added to read: Air barrier is installed in common wall between dwelling units.

17. The following modification has been made to Row 17: In the second column entitled, "Criteria" the wording "thermal," "shall be" and "the" has been stricken and the word "are" has been added. The section has been modified to read: HVAC register boots that penetrate building envelope are sealed to subfloor and drywall.

18. The following modifications have been made to Row 18:

(i) In the first column entitled, "Component" the wording "Concealed sprinklers" has been stricken and replace with "Fireplaces". The section has been modified to read:

Fireplaces.

(ii) In the second column entitled, "Criteria" the wording "when required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacture. Caulking or other adhesive sealants shall not be used to fill void between fire sprinkler cover plates and walls or ceilings" has been stricken. The wording "Fireplace walls include an air barrier" has been added. The section has been modified to read: Fireplace walls include an air barrier.

SAMPLE: TABLE N1102.4.1.1 AIR BARRIER AND INSULATION INSTALLATION

COMPONENT	CRITERIA
Air barrier and thermal barrier	Exterior thermal envelope insulation for framed walls is installed in substantial contact and continuous alignment with the building envelope air barrier. Breaks or joints in the air barrier are filled or repaired. Air-permeable insulation is not used as a sealing material. Air-permeable insulation is inside of an air barrier.
Air barrier in any dropped ceiling/soffit substantially aligned with insulation and any gaps are sealed.	Attic access (except unvented attic), knee wall door, or drop down door stair is sealed.
Walls	Corners and headers are insulated. Junction of foundation and sill plate is sealed.
Windows and doors	The spaces between window/door jambs and framing are sealed.
Rim joists	Rim joists are insulated and include an air barrier.
Floors (including above garage and cantilevered floors)	Insulation installed to maintain permanent contact with the underside of subfloor decking. Air barrier is installed at any exposed edge of floor.
Crawl space walls	Insulation is permanently attached to walls. Exposed earth in unvented crawl spaces is covered with a Class I vapor retarder with overlapping joints taped.
Shafts, penetrations	Duct shafts, utility penetrations knee walls and flue shafts opening to exterior or unconditioned space are sealed.

Narrow cavities	Batts in narrow cavities are cut to fit, or narrow cavities are filled by sprayed/blown insulation
Garage separation	Air sealing is provided between the garage and conditioned space.
Recessed lighting	Recessed light fixtures are airtight, IC rated and sealed to the drywall. Exception: Fixtures in conditioned space.
Plumbing and wiring	Insulation is placed between outside and pipes. Batt insulation is cut to fit around wiring and plumbing or sprayed/blown insulation extends behind piping and wiring.
Shower/tub on exterior wall	Showers and tubs on exterior walls have insulation and an air barrier separating them from the exterior wall.
Electrical/phone box on exterior walls	Air barrier extends behind boxes or air-sealed boxes are installed.
Common Wall	Air barrier is installed common wall between dwelling units.
HVAC register boots	HVAC register boots that penetrate building envelope are sealed to subfloor and drywall.
Fireplaces	Fireplace walls include an air barrier.

Section N1102.4.5 (R402.4.5) Recessed lighting. Recessed luminaries installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned space. All recessed luminaries shall be IC-rated and labeled as ~~having an air leakage rate not more than 2.0 cfm (0.944L/s) when tested in accordance with~~ meeting ASTM E 283 when tested at a 1.57 psi (75 Pa) pressure differential with no more than 2.0 cfm (0.944 L/s) of air movement from the conditioned space to the ceiling cavity. All recessed luminaries shall be sealed with a gasket or caulk between the housing and the interior wall or ceiling cover.

Section N1103.1 (R403.1) Controls (Mandatory). At least one thermostat shall be ~~provided~~ installed for each separate heating and cooling system.

Section N1103.1.1 (R403.1.1) Programmable thermostat. ~~The thermostat controlling the primary heating or cooling system of the~~ Where the primary heating system is a forced air furnace, at least one thermostat per dwelling unit shall be capable of controlling the heating and cooling system on a daily schedule to maintain different temperature set points at different times of the day. This thermostat shall include the capability to set back or temporarily operate the system to maintain zone temperature down to 55 degrees Fahrenheit (13 degrees Celsius) or up to 85 degrees Fahrenheit (29 degrees Celsius). The thermostat shall initially be programmed with a heating temperature set point no higher than 70 degrees Fahrenheit (21 degrees Celsius) and a cooling temperature set point no lower than 78 degrees Fahrenheit (26 degrees Celsius).

Section N1103.3.1 (R403.3.1) Insulation (Prescriptive). Supply ducts in attics shall be insulated to a minimum of R-8 ~~where 3 inches (76.2 mm) in diameter and greater and R-6 where less than 3 inches (76.2 mm) in diameter.~~ Supply and return ducts in other portions of the building shall be insulated to a minimum of R-6 ~~where 3 inches (76.2 mm) in diameter or greater and R-4.2 where less than 3 inches (76.2 mm) in diameter.~~

Exception: Ducts or portions thereof located completely inside the building thermal envelope.

Section N1103.3.2 (R403.3.2) Sealing (Mandatory). Ducts, air handlers, ~~and filter boxes and building cavities used as ducts~~ shall be sealed. Joints and seams shall comply with ~~either the International Mechanical Code or Section M1601.4.~~ For duct systems with sheet metal plenums, Y's and supply boots, only liquid applied sealants complying with UL 181 BM (Mastic or similar) or equivalent method, shall be used to seal inner liners and start collars to plenum and any other seams in the system. Duct tightness shall be verified by one of the following:

1. Post-construction test: Leakage to outdoors shall be less than or equal to 8 cfm (3.78L/s) per 100 square feet (9.29 square meters) of conditioned floor area or a total leakage less than or equal to 12 cfm (5.66 L/s) per 100 square feet (9.29 square meters) of conditioned floor area when tested at a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler end closure. All register boots shall be taped or otherwise sealed during the test.
2. Rough-in test: Total leakage shall be less than or equal to 6 cfm (2.83 L/s) per 100 square feet (9.29 square meters) of conditioned floor area when tested at a pressure differential of 0.1 inch w.g. (25 Pa) across the roughed in system, including the manufacturer's air handler enclosure. All registered boots shall be taped or otherwise sealed during the test. If the air handler is not installed at the time of the test, total leakage shall be less than or equal to 4 cfm (1.89 L/s) per 100 square feet (9.29 square meters) of conditioned floor space.
3. Visual verification by the Authority Having Jurisdiction or an approved agency.

Exception:

Duct tightness test is not required if the air handler and all ducts are located within conditioned space.

~~Air impermeable spray foam products shall be permitted to be applied without additional joint seals~~

~~For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded~~

~~joints and seams, and locking type joints and seams of other than the snap locked and button lock types.~~

Section N1103.3.4 (R403.3.4) Duct leakage (Mandatory). This section has been stricken from the code.

Section N1103.3.5 (R403.3.5) Building cavities (Mandatory). Building framing cavities shall not be used as supply ducts or plenums.

Section N1103.5 (R403.5) Service hot water systems. Energy conservation measures for circulation service potable hot water systems shall be in accordance with Sections N1103.5.1 and N1103.5.2.

Section N1103.6 (R403.6) Mechanical ventilation (Mandatory). ~~The building shall be provided with ventilation that meets the requirements of Section M1507 of this code or the International Mechanical Code, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.~~

Section N1103.7 (R403.7) Equipment sizing and efficiency rating (Mandatory). Heating and cooling equipment shall be sized as specified in M1401.3 in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. ~~New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.~~

Section N1103.8 (R403.8) Systems serving multiple dwelling units (Mandatory). This section has been stricken from the code.

Section N1103.10 (R403.10) Pools and permanent spa energy consumption (Mandatory). ~~The energy consumption of pools and permanent spas shall be in accordance with Sections N1103.10.1 through N1103.10.4~~ Pools shall be provided with energy conservation measures in accordance with Sections N1103.10.2 through N1103.10.4.

Section N1103.10.2 (R403.10.2) Heaters. ~~The electric power to heaters shall be controlled by~~ All pool heaters shall be equipped with a readily accessible on-off switch that is an integral part of the heater mounted on the exterior of the heater, or external to and within 3 feet (914 mm) of the heater. ~~Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater to allow shutting off the heater without adjusting the thermostat setting. Pool heaters fired by natural gas or LPG shall not have continuously burning pilot lights.~~

Section N1103.10.3 (R403.10.3) Time switches. Time switches ~~or other control methods that can automatically turn off and on according to a preset schedule shall be installed for heaters and~~

~~pump motors heaters and pumps according to a preset schedule shall be installed on swimming pool heaters and pumps. Heaters and pump motors that have built-in time switches shall be in compliance with this section.~~

Exceptions:

1. Where public health standards require 24-hour pump operation.
2. Pumps that operate Where pumps are required to operate solar- and waste-heat-recovery pool heating systems.

~~Section N1103.10.4 (R403.10.4) Pool covers. Outdoor heated pools and outdoor permanent spas shall be provided with a vapor retardant cover or other approved vapor retardant means.~~

~~Exception: Where more than 70 percent ... shall not be required.~~

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 (R404.1) Lighting equipment (Mandatory). Not less than 75 percent of the lamps in permanently installed ~~lighting fixtures~~ luminaries shall be high-efficacy lamps or not less than 75 percent of the permanently installed ~~lighting fixtures~~ luminaries shall contain only high-efficacy lamps. Exception: Low-voltage lighting.

Section N1104.1.1 (R401.1) Lighting equipment (Mandatory). This section has been stricken from the code.

Section N1105 (R405) Simulated performance alternative (performance). This section, including all subsections and tables, has been stricken from the code.

Section N1106 (R406) Energy rating index compliance alternative. This section, including all subsections and tables, has been stricken from the code.

Section M1305.1.3 Appliances in attics. This section has been modified to read:

M1305.1.3 Appliances in attics. *Attics containing appliances shall be provided . . . {bulk of paragraph unchanged} . . . sides of the appliance where access is required. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger and large enough to allow removal of the largest appliance. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:*

9. A permanent stair.

10. A pull down stair with a minimum 300 lb (136 kg) capacity.
11. An access door from an upper floor level.

Exceptions:

1. The passageway and level service space are not required where the *appliance* can be serviced and removed through the required opening.
2. Where the passageway is unobstructed...*{remaining text unchanged}*

Section M1411.3 Condensate disposal. Condensate from all cooling coils or evaporators shall be conveyed from the drain pan outlet to ~~an approved place of disposal~~ a sanitary sewer through a trap, by means of a direct or indirect drain. *{remaining text unchanged}*

Section M1411.3.1 Auxiliary and secondary drain systems. *{bulk of paragraph unchanged}*

1. *{text unchanged}*
2. *{text unchanged}*
3. An auxiliary drain pan... *{bulk of text unchanged}*... with Item 1 of this section. A water level detection device may be installed only with prior approval of the building official.
4. A water level detection device... *{bulk of text unchanged}*... overflow rim of such pan. A water level detection device may be installed only with prior approval of the building official.

Section M1411.3.1.1 Water-level monitoring devices. On down-flow units ...*{bulk of text unchanged}*... installed in the drain line. A water level detection device may be installed only with prior approval of the building official.

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 (914 mm) in any direction from the openings into buildings nor less than 12 inches from finished ground level or other obstruction. Exhaust duct terminations shall be equipped with a backdraft damper. Additionally, exhaust shall not terminate within 3 feet (914 mm) of condensing units and a minimum 12 inches (305 mm) from the ground or any obstruction. Screens shall not be installed at the duct termination.

Section M1502.4.2 Duct installation. Exhaust ducts shall be supported at intervals ~~not to exceed 12 feet (3658 mm) and shall be secured in place.~~ 4 feet (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the

direction of airflow. ~~Exhaust duct joints shall be sealed in accordance with Section M1601.4.1 and shall be mechanically fastened.~~ Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.

Section M1503.4 Makeup air required. Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19 m³/s) shall be provided with makeup air at a rate approximately equal to the difference between the exhaust air rate and 400 cubic feet per minute. Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Exception:

Where all appliances in the house are of sealed combustion, power-vent, unvented, or electric, the exhaust hood system shall be permitted to exhaust up to 600 cubic feet per minute (0.28 m³/s) without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.28 m³/s) shall be provided with a makeup air at a rate approximately equal to the difference between the exhaust air rate and 600 cubic feet per minute.

Table M1601.1.1 This table has been modified to read:

The description of the newly created table is listed below:

1. Row 1: Contains the three column headings as follows:
 - (i) Column 1 heading is entitled "Duct Size"
 - (ii) Column 2 heading is entitled "Galvanized" with two sub-columns; the first subcolumn is entitled "Minimum Thickness (inches)" and the second sub-column is entitled "Equivalent Galvanized Gage No."
 - (iii) Column 3 heading is "Approximate Aluminum B and S Gage."

2. Row 2: Under the first column entitled "Duct Size" are four sub-rows with corresponding dashes or figures that match to each sub-row in the second (including subcolumns) and third columns. Those sub-rows and figures are as follows:
 - (i) Sub-row 1 in column 1 lists "Round ducts and enclosed" and in column 2 entitled, "Galvanized," (sub-column "Minimum Thickness (inches)" and sub-column "Equivalent Galvanized Gage No." and in column 3 entitled "Approximate Aluminum B and S Gage" a "dash" is listed instead of a figure.

- (ii) Sub-row 2 in column 1 lists "Rectangular ducts" and in column 2, entitled "Galvanized" (sub-column "Minimum Thickness (inches)" and sub-column "Equivalent Galvanized Gage No." and in column 3, entitled "Approximate Aluminum B and S Gage" a "dash" is listed instead of a figure.
 - (iii) Sub-row 3 in column 1 lists "14 inches or less" and in column 2, entitled "Galvanized," sub-column "Minimum Thickness (inches)" lists the figure "0.013", sub-column "Equivalent Galvanized Gage No." lists the figure "30," and column 3 entitled "Approximate Aluminum B and S Gage" lists the figure "26."
 - (iv) Sub-row 4 in column 1 lists "Over 14 inches" and in column 2, sub-column "Minimum Thickness (inches)" lists the figure "0.16", sub-column "Equivalent Galvanized Gage No." lists the figure "28" and column 3 entitled "Approximate Aluminum B and S Gage" lists the figure "24."
3. Row 3: Under the first column entitled "Duct Size" are three sub-rows with corresponding dashes or figures that match to each sub-row in the second column and the third column. Those sub-rows and figures are as follows:
- (i) Sub-row 1 in column 1 lists "Exposed rectangular ducts" and in column 2, entitled, "Galvanized," (sub-column "Minimum Thickness (inches) and sub-column "Equivalent Galvanized Gage No." and in column 3 entitled "Approximate Aluminum B and S Gage" a "dash" is listed instead of a figure.
 - (ii) Sub-row 2 in column 1 lists "14 inches or less" and in column 2, sub-column "Minimum Thickness (inches)" lists the figure "0.016", sub-column "Equivalent Galvanized Gage No." lists the figure "28" and column 3 entitled "Approximate Aluminum B and S Gage" lists the figure "24."
 - (iii) Sub-row 3 in column 1 lists "Over 14 inches" and has a superscript "a" to indicate an associated footnote. In column 2, sub-column "Minimum Thickness (inches)" lists the figure "0.19", sub-column "Equivalent Galvanized Gage No." lists the figure "26" and column 3 entitled "Approximate Aluminum B and S Gage" lists the figure "22."
4. Between the end of the table and Footnote "a" is the wording "For SI: 1 inch is equal to 25.4 mm."
5. Footnote "a" has been added to read: a. Ductwork that exceeds 20 inches by dimension or exceeds a pressure of 1 inch water gage (250 pa) shall be constructed in accordance with SMACNA HVAC Duct Construction Standards Metal and Flexible.

SAMPLE: TABLE M1601.1.1 DUCT CONSTRUCTION MINIMUM SHEET METAL

THICKNESS FOR SINGLE DWELLING UNITS

DUCT SIZE	GALVANIZED Minimum thickness (inches)	GALVANIZED Equivalent Galvanized Gage No.	APPROXIMATE ALUMINUM B AND S GAGE
Round ducts and enclosed	-	-	-
Rectangular ducts	-	-	-
14 inches or less	0.013	30	26
Over 14 inches	0.016	28	24
Exposed rectangular ducts	-	-	-
14 inches or less	0.016	28	24
Over 14 inches	0.019	26	22

For SI: 1 inch = 25.4 mm

- a. Duct work that exceeds 20 inches by dimension or exceeds a pressure of 1 inch water gage (250 Pa) shall be constructed in accordance with SMACNA HVAC Duct Construction Standards - Metal and Flexible

Section M1601.4.1 Joints, seams, and connections. Longitudinal and transverse joints, seams and connections in metallic and nonmetallic ducts shall be constructed as specified in SMACNA HVAC Duct Construction Standards-Metal and Flexible and NAIMA Fibrous Glass Duct Construction Standards. Joints, longitudinal and transverse seams, and connection in ductwork shall be securely fastened and sealed with welds, gaskets, mastics (adhesive), mastic-plus-embedded-fabric systems, liquid sealants or tapes. Tapes and mastics used to seal fibrous glass ductwork shall be listed and labeled in accordance with UL 181A and shall be marked "181A-P" for pressure-sensitive tape, "181 A-M" for mastic or "181 A-H" for heat-sensitive tape.

Tapes and mastics used to seal metallic and flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked "181 B-FX" for pressure-sensitive tape or "181 BM" for mastic. Duct connections to flanges of air distribution system equipment shall be sealed and mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B-C. Crimps joints for round metallic ducts shall have a contact lap of not less than 1 inch (25 mm) and shall be mechanically fastened by means of not less than three sheet metal screws or rivets equally spaced around the joint.

Closure systems used to seal all ductwork shall be installed in accordance with the manufacturers' instructions.

Exceptions:

1. Spray polyurethane foam shall be permitted to be applied without additional joint seals.
2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.

3. For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams and locking-type joints and seams of other than the snap lock and button-lock types.
4. For duct systems with sheet metal plenums, Y's and supply boots, only liquid applied sealants complying with UL 181 BM (Mastic or similar) or equivalent method, shall be used to seal inner liners and start collars to plenum and any other seams in system.

Section M1903.1.1 Electrical requirements. In addition to the requirements of M1903.1, interconnection and all associated wiring shall be installed in accordance with NFPA 70, NEC®, 2014, Article 692 Fuel Cell Systems.

Section M2005.2 Prohibited locations. Fuel-fired water heaters shall not be installed in a room used as a storage closet. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure so that *combustion air* will not be taken from the living space. Access to such enclosure may be from the bedroom or bathroom when through a solid door, weather-stripped in accordance with the exterior door air leakage requirements and equipped with an approved self-closing device. Installation of direct-vent water heaters within an enclosure is not required

Section 2401.2 is hereby added to read as follows:

Section G2401.2 Residential gas meter location. Gas meters shall be located as required by the gas supplier.

Section G2412.2.1 Footing. An eight inch (8") deep solid footer must be placed within natural soil under the supporting legs of the liquefied petroleum gas storage. The footer must exceed a minimum of three inches (3") from the furthest point of the supporting leg of the liquefied petroleum gas storage.

Section G2415.12 Minimum burial depth. G2415.12 Minimum burial depth. Underground piping systems shall be installed a minimum depth of ~~12 inches (305 mm)~~ 18 inches (457.5 mm) below grade, except as provided for in Section G2415.12.1.

Section G2415.13.1 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 of horizontal separation of the different piping systems is maintained.

Section G2415.2.1 (404.2.1); add a second paragraph to read as follows:

Both ends of each section of medium pressure gas piping shall identify its operating gas pressure with an *approved* tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:

"WARNING: 1/2 to 5 psi gas pressure - Do Not Remove"

Section CSST G2415.2.2 (404.2.2); add a third paragraph to read as follows:

Corrugated stainless steel tubing (CSST) shall be a minimum of 1/2" (18 EDH).

Section G2417.1 (406.1) General. Prior to acceptance and initial operation, all *pipng* installations shall be inspected and *pressure tested* to determine that the materials, design, fabrication, and installation practices comply with the requirements of this *code*. The *permit* holder shall make the applicable tests prescribed in Sections 2417.1.1 through 2417.1.5 to determine compliance with the provisions of this *code*. The *permit* holder shall give reasonable advance notice to the *building official* when the *pipng system* is ready for testing. The *equipment*, material, power and labor necessary for the inspections and test shall be furnished by the *permit* holder and the *permit* holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.

Section G2420.1.4 (409.1.4) Valves in CSST installations. Shutoff *valves* installed with corrugated stainless steel (CSST) *pipng systems* shall be supported with an approved termination fitting, or equivalent support, suitable for the size of the *valves*, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12-inches from the center of the *valve*. Supports shall be installed so as not to interfere with the free expansion and contraction of the system's *pipng*, fittings, and *valves* between anchors. All *valves* and supports shall be designed and installed so they will not be disengaged by movement of the supporting *pipng*.

Section G2420.5.1 (409.5.1) Located within the same room. The shutoff valve ...*{bulk of paragraph unchanged}*... in accordance with the appliance manufacturer's instructions. A secondary shutoff valve must be installed within 3 feet (914 mm) of the firebox if appliance shutoff is located in the firebox.

Section G2421.1 (410.1) Pressure regulators. A line *pressure regulator* shall be ... *{bulk of paragraph unchanged}*... *approved* for outdoor installation. Access to *regulators* shall comply with the requirements for access to *appliances* as specified in Section M1305.

Exception: A passageway or level service space is not required when the *regulator* is capable of being serviced and removed through the required *attic* opening.

Section P2503.4 Building sewer testing. ~~The building sewer shall be tested by insertion of a test plug at the point of connection with the public sewer, filling the building sewer with water and pressurizing the sewer to not less than 10-foot (3048 mm) head of water. The test pressure~~

~~shall not decrease during a period of not less than 15 minutes. The building sewer shall be watertight at all points. A forced sewer test shall consist of pressurizing the piping to a pressure of not less than 5 psi (34.5 kPa) greater than the pump rating and maintaining such pressure for not less than 15 minutes. The forced sewer shall be water tight at all points.~~

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, filling the building sewer with water and pressurizing the sewer to not less than 5-foot (1524 mm) head of water. The test pressure shall not decrease during a period of not less than 15 minutes. The building sewer shall be water tight at all points.

A forced sewer test shall consist of pressuring the piping to a pressure of not less than 5 psi (34.5 kPa) greater than the pump rating and maintaining such pressure for not less than 15 minutes. The forced sewer shall be water tight at all points.

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 plastic "PCV/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 P2603.4 Pipes through foundation walls. A pipe that passes through a foundation wall shall be provided with a relieving arch, or a pipe sleeve shall be built into the foundation wall. The relieving arch or pipe sleeve shall conform to one of the materials and standards listed in Table P3002.1 (2). The sleeve shall be two pipe sizes greater than the pipe passing through the wall.

Section P2603.5.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be not less than ~~{number} inches (mm)~~ 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 not less than ~~{number} inches (mm)~~ 12 inches (305 mm) below grade.

Section P2704.1 General. Slip joints shall be made with an approved elastomeric gasket and shall be installed ~~only on the trap outlet, trap inlet and within the trap seal~~ from the fixture to within 18 inches (457 mm) downstream of the trap outlet seal. 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-joint connections for inspection and repair.

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 following materials:

1. Sheet lead.

2. Sheet copper.
3. Plastic liner that material complies with ASTM D 4068 or ASTM D 4551.
4. Hot mopping in accordance with Section P2709.2.3.
5. Sheet-applied load-bearing, bonded waterproof membranes that comply with ANSI A118.10.

The lining material shall extend not less than ~~2 inches (52 mm)~~ 3 inches (76 mm) beyond or around the rough jambs and not less than ~~2 inches (52 mm)~~ 3 inches (76 mm) above finished thresholds. Sheet-applied load bearing, bonded waterproof membranes shall be applied in accordance with the manufacturer's installation instructions.

Section P2715.1 Laundry ~~tub~~ tray waste outlet. Each compartment of a laundry ~~tub~~ 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 P2804.6.1 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap ~~located in the same room as the water heater.~~
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: Multiple relief devices may be installed to a single T & P discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

5. Discharge ~~to the floor,~~ to an indirect waste receptor or to the outdoors.

[remainder unchanged]

Section P2902.5.3 Lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric vacuum breaker, a pressure vacuum breaker assembly, or a reduced pressure principle backflow prevention assembly. Valves shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be against backflow by a reduced pressure principle backflow prevention assembly.

Any system installed with a chemical injection irrigation system must utilize a Reduced Pressure Principle Zone backflow device.

Section P2902.7 Protection of Individual water supplies. An individual water supply shall be located and constructed so as to be safeguarded against contamination in accordance with Section 608.17.1 through 608.17.8 of the *2015 International Plumbing Code*.

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

Section P2904.1.1 Required sprinkler locations: Sprinklers shall be installed to protect all areas of a townhouse dwelling unit.

Section P2906.4 Water service pipe. Water service pipe shall conform to NSF 61 and shall conform to one of the standards indicated in Table P2906.4. Water service pipe or tubing, installed underground and outside of the structure, shall have a minimum working pressure rating of not less than 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 ~~or before the full open valve located at the entrance to the structure~~ least 30 inches outside the exterior wall. Ductile iron water service piping shall be cement mortar lined in accordance with AWWA C104/A21.4.

Section P2914, Lawn Irrigation.

This Section has been newly created and entitled "**Section P2914 Lawn Irrigation.**"

Section P2914.1 General. The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- or two-family dwelling.

P2914.2 Definitions.

Section P2914.2 Definitions. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in this Section.

43. AIR GAP--A complete physical separation between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel.
44. ATMOSPHERIC VACUUM BREAKER--An assembly containing an air inlet valve, a check seat, and an air inlet port. The flow of water into the body causes the air inlet valve to close

the air inlet port. When the flow of water stops the air inlet valve falls and forms a check against back-siphonage. At the same time it opens the air inlet port allowing air to enter and satisfy the vacuum. Also known as an Atmospheric Vacuum Breaker Back-Siphonage Prevention Assembly.

45. BACKFLOW PREVENTION--The mechanical prevention of reverse flow, or back-siphonage, of non-potable water from an irrigation system into the potable water source.
46. BACKFLOW PREVENTION ASSEMBLY--Any assembly used to prevent backflow into a potable water system. The type of assembly used is based on the existing or potential degree of health hazard and backflow condition.
47. COMPLETION OF IRRIGATION SYSTEM INSTALLATION--When the landscape irrigation system has been installed, all minimum standards met, all tests performed, and the irrigator is satisfied that the system is operating correctly.
48. CONSULTING--The act of providing advice, guidance, review or recommendations related to landscape irrigation systems.
49. CROSS-CONNECTION--An actual or potential connection between a potable water source and an irrigation system that may contain contaminants or pollutants or any source of water that has been treated to a lesser degree in the treatment process.
50. DESIGN--The act of determining the various elements of a landscape irrigation system that will include, but not be limited to, elements such as collecting site specific information, defining the scope of the project, defining plant watering needs, selecting and laying out emission devices, locating system components, conducting hydraulics calculations, identifying any local regulatory requirements, or scheduling irrigation work at a site. Completion of the various components will result in an irrigation plan.
51. DESIGN PRESSURE. The pressure that is required for an emission device to operate properly. Design pressure is calculated by adding the operating pressure necessary at an emission device to the total of all pressure losses accumulated from an emission device to the water source.
52. EMISSION DEVICE. Any device that is contained within an irrigation system and that is used to apply water. Common emission devices in an irrigation system include, but are not limited to, spray and rotary sprinkler heads, and drip irrigation emitters.
53. EMPLOYED. Engaged or hired to provide consulting services or perform any activity relating to the sale, design, installation, maintenance, alteration, repair, or service to irrigation systems. A person is employed if that person is in an employer-employee

relationship as defined by Internal Revenue Code, 26 United States Code Service, §3212(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.

54. HEAD-TO-HEAD SPACING. The spacing of spray or rotary heads equal to the manufacturer's published radius of the head.
55. HEALTH HAZARD. A cross-connection or potential cross-connection with an irrigation system that involves any substance that may, if introduced into the potable water supply, cause death or illness, spread disease, or have a high probability of causing such effects.
56. HYDRAULICS. The science of dynamic and static water; the mathematical computation of determining pressure losses and pressure requirements of an irrigation system.
57. INSPECTOR. A licensed plumbing inspector, water district operator, other governmental entity, or irrigation inspector who inspects irrigation systems and performs other enforcement duties for a municipality or water district as an employee or as a contractor.
58. INSTALLER. A person who actually connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is with the City of Choctaw.
59. IRRIGATION PLAN. A scaled drawing of a landscape irrigation system which lists required information, the scope of the project, and represents the changes made in the installation of the irrigation system.
60. IRRIGATION SERVICES. Selling, designing, installing, maintaining, altering, repairing, servicing, permitting, providing consulting services regarding, or connecting an irrigation system to a water supply.
61. IRRIGATION SYSTEM. An assembly of component parts that is permanently installed for the controlled distribution and conservation of water to irrigate any type of landscape vegetation in any location, and/or to reduce dust or control erosion. This term does not include a system that is used on or by an agricultural operation as defined by Oklahoma Water Resources Board.
62. IRRIGATION TECHNICIAN. A person who works under the supervision of a licensed irrigator to install, maintain, alter, repair, service or supervise installation of an irrigation system, including the connection of such system in or to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed with the City of Choctaw.

63. IRRIGATION ZONE. A subdivision of an irrigation system with a matched precipitation rate based on plant material type (such as turf, shrubs, or trees), microclimate factors (such as sun/shade ratio), topographic features (such as slope) and soil conditions (such as sand, loam, clay, or combination) or for hydrological control.
64. IRRIGATOR. A person who sells, designs, offers consultations regarding, installs, maintains, alters, repairs, services or supervises the installation of an irrigation system, including the connection of such system to a private or public, raw or potable water supply system or any water supply.
65. IRRIGATOR-IN-CHARGE. The irrigator responsible for all irrigation work performed by an exempt business owner, including, but not limited to obtaining permits, developing design plans, supervising the work of other irrigators or irrigation technicians, and installing, selling, maintaining, altering, repairing, or servicing a landscape irrigation system.
66. LANDSCAPE IRRIGATION. The science of applying the necessary amount of water to promote or sustain healthy growth of plant material or turf.
67. LICENSE. An occupational license that is issued by the City of Choctaw to an individual that authorizes the individual to engage in an activity
68. MAINLINE. A pipe within an irrigation system that delivers water from the water source to the individual zone valves.
69. MAINTENANCE CHECKLIST. A document made available to the irrigation system's owner or owner's representative that contains information regarding the operation and maintenance of the irrigation system, including, but not limited to: checking and repairing the irrigation system, setting the automatic controller, checking the rain or moisture sensor, cleaning filters, pruning grass and plants away from irrigation emitters, using and operating the irrigation system, the precipitation rates of each irrigation zone within the system, any water conservation measures currently in effect from the water purveyor, the name of the water purveyor, a suggested seasonal or monthly watering schedule based on current evapotranspiration data for the geographic region, and the minimum water requirements for the plant material in each zone based on the soil type and plant material where the system is installed.
70. MAJOR MAINTENANCE, ALTERATION, REPAIR, OR SERVICE. Any activity that involves opening to the atmosphere the irrigation main line at any point prior to the discharge side of any irrigation zone control valve. This includes, but is not limited to, repairing or connecting into a main supply pipe, replacing a zone control valve, or repairing a zone control valve in a manner that opens the system to the atmosphere.

71. MASTER VALVE. A remote control valve located after the backflow prevention device that controls the flow of water to the irrigation system mainline.
72. MATCHED PRECIPITATION RATE. The condition in which all sprinkler heads within an irrigation zone apply water at the same rate.
73. NEW INSTALLATION. An irrigation system installed at a location where one did not previously exist.
74. PASS-THROUGH CONTRACT. A written contract between a contractor or builder and a licensed irrigator or exempt business owner to perform part or all of the irrigation services relating to an irrigation system.
75. POTABLE WATER. Water that is suitable for human consumption.
76. PRESSURE VACUUM BREAKER. An assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve.
77. RECLAIMED WATER. Domestic or municipal wastewater which has been treated to a quality suitable for beneficial use, such as landscape irrigation.
78. RECORDS OF LANDSCAPE IRRIGATION ACTIVITIES. The irrigation plans, contracts, warranty information, invoices, copies of permits, and other documents that relate to the installation, maintenance, alteration, repair, or service of a landscape irrigation system.
79. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY. An assembly containing two independently acting approved check valves together with a hydraulically operating mechanically independent pressure differential relief valve located between the two check valves and below the first check valve.
80. STATIC WATER PRESSURE. The pressure of water when it is not moving.
81. SUPERVISION. The on-the-job oversight and direction by a licensed irrigator who is fulfilling his or her professional responsibility to the client and/or employer in compliance with local or state requirements.
82. WATER CONSERVATION. The design, installation, service, and operation of an irrigation system in a manner that prevents the waste of water, promotes the most efficient use of water, and applies the least amount of water that is required to maintain healthy individual plant material or turf, reduce dust, and control erosion.

83. ZONE FLOW. A measurement, in gallons per minute or gallons per hour, of the actual flow of water through a zone valve, calculated by individually opening each zone valve and obtaining a valid reading after the pressure has stabilized. For design purposes, the zone flow is the total flow of all nozzles in the zone at a specific pressure.
84. ZONE VALVE. An automatic valve that controls a single zone of a landscape irrigation system.

Section P2914.3 Valid License Required. Any person who connects an irrigation system to the water supply within the City of Choctaw or to a private water system, must hold a valid license with the City of Choctaw.

Exemptions: A property owner is not required to be licensed if he or she is performing irrigation work in a building or on a premises owned or occupied by the person as the person's home. Home or property owner's property must have a current homestead exemption.

A home or property owner who installs an irrigation system must meet the standards contained within this section and the adopted codes regarding spacing, water pressure, spraying water over impervious materials, rain or moisture shut-off devices or other technology, backflow prevention and isolation valves.

Section P2914.4 Permit Required. Any person installing an irrigation system within the City of Rockwall is required to obtain a permit from the city. Any plan approved for a permit must be in compliance with the requirements of this chapter.

Exemptions:

3. An irrigation system that is that an on-site sewage disposal system; or
4. An irrigation system used on or by an agricultural operation.

Section P2914.5.1 Backflow Prevention Methods and Devices. All backflow prevention methods and devices must conform to Section P2902.5.3 "Lawn Irrigation System."

Section P2914.5.2 Missing Backflow Prevention Protection. All irrigation systems found to be without backflow prevention protection that are connected to the potable water supply, must be connected to the potable water supply through an approved, properly installed backflow prevention assembly, before any major maintenance, alteration, repair, or service is performed.

Section P2914.6 Backflow Testing. The irrigator shall ensure the backflow prevention device is tested by a licensed plumber prior to being placed in service. The test results must be provided to the City of Choctaw and the irrigation system's owner or owner's representative within ten business days of testing of the backflow prevention device. Test results must be submitted on an approved Backflow Prevention Assembly Test and Maintenance Report form.

Section P2914.7 Water Conservation. All irrigation systems shall be designed, installed, maintained, altered, repaired, serviced, and operated in a manner that will promote water conservation

Section P2914.8.1 Irrigation Plan Design. An irrigator shall prepare an irrigation plan for each site where a new irrigation system will be installed. A paper or electronic copy of the irrigation plan must be on the job site at all times during the installation of the irrigation system. A drawing showing the actual installation of the system is due to each irrigation system owner after all new irrigation system installations. During the installation of the irrigation system, variances from the original plan may be authorized by the licensed irrigator if the variance from the plan does not:

3. Diminish the operational integrity of the irrigation system; or
4. Violate any requirements of the City of Choctaw or the State of Oklahoma regulations.

Section P2914.8.2 Irrigation Plan Drawing. All irrigation plans used for construction must be drawn to scale. The plan must include, at a minimum, the following information:

9. All major physical features and the boundaries of the areas to be watered;
10. North arrow;
11. A legend;
12. The zone flow measurement for each zone;
13. Location and type of each:
 - (i.) Controller;
 - (ii.) Sensor (for example, but not limited to, rain, moisture, wind, flow, or freeze).
14. Location, type, and size of each:
 - (i.) Water source, such as, but not limited to a water meter and point(s) of connection;
 - (ii.) Backflow prevention device;
 - (iii.) Water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick-couplers, bubblers, drip, or micro-sprays;
 - (iv.) Valve, including but not limited to, zone valves, master valves, and isolation valves;
 - (v.) Pressure regulation component; and
 - (vi.) Main line and lateral piping.
15. The scale used; and
16. The design pressure.

Section P2914.9 Irrigation Minimum Requirements. All irrigation design and installation must be constructed to the minimum requirement listed below:

Section P2914.9.1 Manufacturer's limitations. No irrigation design or installation shall require the use of any component, including the water meter, in a way which exceeds the manufacturer's published performance limitations for the component.

Section P2914.9.2 Spacing. The irrigation system shall have the proper spacing that are listed below:

4. The maximum spacing between emission devices must not exceed the manufacturer's published radius or spacing of the device(s). The radius or spacing is determined by referring to the manufacturer's published specifications for a specific emission device at a specific operating pressure.
5. New irrigation systems shall not utilize above-ground spray emission devices in landscapes that are less than 48 inches not including the impervious surfaces in either length or width and which contain impervious pedestrian or vehicular traffic surfaces along two or more perimeters. If pop-up sprays or rotary sprinkler heads are used in a new irrigation system, the sprinkler heads must direct flow away from any adjacent surface and shall not be installed closer than four inches from a hardscape, such as, but not limited to, a building foundation, fence, concrete, asphalt, pavers, or stones set with mortar.
6. Narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public areas may be exempted from this requirement if the runoff drains into a landscaped area

Section P2914.9.3 Water Pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator, or pressure compensating spray heads

Section P2914.9.4 Irrigation Zones. Irrigation Zones - Irrigation systems shall have separate zones based on plant material type, microclimate factors, topographic features, soil conditions, and hydrological requirements.

Section P2914.9.5 Matched Precipitation Rate. Zones must be designed and installed so that all of the emission devices in that zone irrigate at the same precipitation rate.

Section P2914.9.6 Impervious Surface. Irrigation systems shall not spray water over surfaces made of concrete, asphalt, brick, wood, stones set with mortar, or any other impervious material, such as, but not limited to, walls, fences, sidewalks, streets, etc.

Section P2914.9.7 Master Valve. When provided, a master valve shall be installed on the discharge side of the backflow prevention device on all new installations.

Section P2914.9.1.8 Pipe Primer and Solvent. All new irrigation systems that are installed using PVC pipe and fittings shall be primed with a purple colored primer prior to applying the PVC cement in accordance with the City of Choctaw adopted International Plumbing Code.

Section P2914.9.1.9 Moisture Shut-Off. All new automatically controlled irrigation systems must include sensors or other technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture. Moisture shut-off technology must be installed according to the manufacturer's published recommendations. Repairs to existing automatic irrigation systems that require replacement of an existing controller must include a sensor or other technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture or rainfall.

All new automatically controlled irrigation systems must include sensors or other technology designed to inhibit or interrupt operation of the irrigation system during periods of freezing weather.

Section P2914.9.1.10 Isolation Valve. All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device. The isolation valve must be a ball valve and be equipped with a stainless steel handle. The ball valve must be installed within a plastic valve or meter box large enough as not to hamper operation or repair.

Section P2914.9.1.11 Location of Irrigation System. Access shall be provided to backflow preventers, controllers, valves, lines, wire, etc.

Section P2914.9.1.11.1 Backflow Preventers. The location of the backflow preventers shall follow the regulations within this Section and the codes adopted in the International Plumbing Code.

Section P2914.9.1.11.1.1 Location of Backflow Preventers.

Placement of the Backflow Preventer must meet all manufacture's requirements.

Section P2914.9.1.11.1.2 Outdoor Enclosures for Backflow Prevention Device.

Outdoor enclosures for backflow prevention devices shall comply with ASSE 1060. This includes any area outside of the building envelope.

Section P2914.9.1.11.1.3 Protection of backflow preventers.

Backflow preventers shall not be located in areas subject to freezing except where they can be removed by means of unions or are protected by heat, insulation or both.

Section P2914.9.1.11.1.4 Relief port. The relief port or air gap fitting of the backflow preventer shall discharge to an approved indirect waste receptor or to the outdoor where it will not cause damage or create a nuisance.

Section P2914.9.1.11.2 Location of Irrigation lines and Water emission. The location of the irrigation piping and water emissions from the irrigation system shall follow the regulations within this Section and the codes adopted in the International Plumbing Code.

Section P2914.9.1.11.2.1 Public Right of Way and Roadway Easement.

Any part or portion of the irrigation piping is encourage to not be installed or located within the public right of way or public roadway easement.

Section P2914.9.1.11.2.2 Un-curbed Public Street.

Any part or portion of the irrigation piping shall not be located within the public right of way or public roadway easement.

Section P2914.9.1.11.2.3 Curbed Public Street.

The irrigation system is permitted to be placed within the public right of way or public roadway easement, but any water emitter must be a minimum of twelve inches (12") from the back of the concrete or asphalt curb.

Section P2914.9.1.11.2.4 Property Owner.

If any portion of an irrigation system is located within a public right of way or public roadway easement must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety or maintenance issues.

Section P2914.9.1.12 Depth Coverage of Piping. Piping in all irrigation systems must be installed according to this Section.

Section P2914.9.1.12.1 Depth of Main Irrigation Line. The piping must be installed to provide minimum depth coverage of eighteen inches (18") of select backfill, between the top of the pipe and the natural grade of the topsoil.

Section P2914.9.1.12.2 Depth of Secondary Irrigation Line. The piping must be installed to provide minimum depth coverage of twelve inches (12") of select backfill, between the top of the pipe and the natural grade of the topsoil.

Section P2914.9.1.12.2.1 Secondary in Bedrock. If the area being irrigated has rock at a depth of twelve inches (12") or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety issues.

Section P2914.9.1.12.3. Obstruction of a Utility. If a utility, man-made structure, or roots create an unavoidable obstacle, which makes the required depth coverage requirement impractical, the piping shall be installed to provide a minimum of twelve inches (12") for a main irrigation line and eight inches (8") for a secondary irrigation line of select backfill between the top of the pipe and the natural grade of the topsoil. All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.

Section P2914.9.1.13 Wiring Irrigation System. Underground electrical wiring used to connect an automatic controller to any electrical component of the irrigation system must be listed by Underwriters Laboratories as acceptable for burial underground.

Electrical wiring that connects any electrical components of an irrigation system must be sized according to the manufacturer's recommendation. Electrical wire splices which may be exposed to moisture must be waterproof.

Underground electrical wiring that connects an automatic controller to any electrical component of the irrigation system must be buried with a minimum of twelve inches (12") of select backfill.

Section P2914.10 Non-Potable Water. This section shall be added to read:

Section P2914.10.1 Non-Potable Water. Water contained within the piping of an irrigation system is deemed to be non-potable. No drinking or domestic water usage, such as, but not

limited to, filling swimming pools or decorative fountains, shall be connected to an irrigation system.

A hose bib (an outdoor water faucet that has hose threads on the spout) is not permitted to be connected to an irrigation system for the purpose of providing supplemental water to an area.

Section P2914.10.2 Labeling and Marking Non-Potable Water. Non potable distribution piping shall be purple in color and shall be embossed or integrally stamped or marked with words: "CAUTION: NONPOTABLE WATER – DO NOT DRINK" or the piping shall be installed with a purple identification tape or wrap. Pipe identification shall be repeated at intervals not exceeding twenty-five (25) feet and at each point where the piping passed through a wall, floor or roof. Lettering shall be readily observable with the space where the piping is located.

Section P2914.10.2.1 Color. The color of the pipe identification shall be discernable and consistent throughout the area. The color purple shall be used to identify the non-potable water.

Section P2914.10.2.2 Identification Tape. Where used, identification tape shall be not less than three inches (3") wide and have white or black lettering on a purple field stating "CAUTION: NONPOTABLE WATER – DO NOT DRINK." Identification tape shall be installed on top of non-potable pipes and run continuously the entire length of the pipe.

Section P2914.11 Irrigator On-Site. An irrigation technician shall be on-site at all times while the landscape irrigation system is being installed. When an irrigator is not onsite, the irrigator shall be responsible for ensuring that a licensed irrigation technician is on-site to supervise the installation of the irrigation system.

Section P2914.12 Completion of Irrigation System Installation. Upon completion of the irrigation system, the irrigator or irrigation technician who provided supervision for the on-site installation shall be required to complete four items:

5. A final "walk through" with the irrigation system's owner or the owner's representative to explain the operation of the system;
6. The maintenance checklist on which the irrigator or irrigation technician shall obtain the signature of the irrigation system's owner or owner's representative and shall sign, date, and seal the checklist. If the irrigation system's owner or owner's representative is unwilling or unable to sign the maintenance checklist, the irrigator shall note the time and date of the refusal on the irrigation system's owner or owner's representative's signature line. The irrigation system owner or owner's representative will be given the original maintenance

checklist and a duplicate copy of the maintenance checklist shall be maintained by the irrigator. The items on the maintenance checklist shall include but are not limited to:

- (i.) the manufacturer's manual for the automatic controller, if the system is automatic;
 - (ii.) A seasonal (spring, summer, fall, winter) watering schedule based on either current/real time evapotranspiration or monthly historical reference evapotranspiration (historical ET) data, monthly effective rainfall estimates, plant landscape coefficient factors, and site factors;
 - (iii.) A list of components, such as the nozzle, or pump filters, and other such components; that require maintenance and the recommended frequency for the service; and
 - (iv.) The statement, "This irrigation system has been installed in accordance with all applicable state and local laws, ordinances, rules, regulations or orders. I have tested the system and determined that it has been installed according to the Irrigation Plan and is properly adjusted for the most efficient application of water at this time."
7. A permanent sticker which contains the irrigator's name, license number, company name, telephone number and the dates of the warranty period shall be affixed to each automatic controller installed by the irrigator or irrigation technician. If the irrigation system is manual, the sticker shall be affixed to the original maintenance checklist. The information contained on the sticker must be printed with waterproof ink.
8. The irrigation plan indicating the actual installation of the system must be provided to the irrigation system's owner or owner representative.

Section P2914.13 Duties and Responsibilities of City Irrigation Inspectors. The irrigation inspector shall enforce the ordinance of the city, and shall be responsible for:

7. Verifying that the appropriate permits have been obtained for an irrigation system and that the irrigator and installer or irrigation technician, if applicable, are licensed;
8. Inspecting the irrigation system;
9. Determining that the irrigation system complies with the requirements of this chapter;

10. Determining that the appropriate backflow prevention device was installed, tested, and test results provided to the city;
11. Investigating complaints related to irrigation system installation, maintenance, alteration, repairs, or service of an irrigation system and advertisement of irrigation services; and
12. Maintaining records according to this chapter.

Section P2914.14 Fees. Irrigation and Backflow device permit fees shall be established in the fee schedule approved by the city council.

Section P2914.15 Irrigation System within the Public Right of Way or Public Roadway Easement. The City of Choctaw or the Choctaw Utilities Authority shall not be held liable for any damage of any system, which results from the installation or repair of, or improvement of any street or utility. Any homeowner or irrigator who installs a lawn sprinkler system between the curb and sidewalk or elsewhere within the public right of way or public roadway easement shall likewise hold the City of Choctaw and Choctaw Utilities Authority harmless against any claim or injury to persons or damage to property that any member of the public may suffer by reason of installation of said lawn sprinkling system within the public right of way.

Section P3003.2 Prohibited joints. Running threads and bands shall not be used in the drainage system. Drainage and vent piping shall not be drilled, tapped, burned, or welded. The following types of joints and connections shall be prohibited:

1. Cement or concrete.
2. Mastic or hot-pour bituminous joints.
3. Joints made with fittings not approved for the specific installation.
4. Joints between different diameter pipes made with elastomeric rolling O-rings.
5. Solvent-cement joints between different types of plastic pipe.
6. Saddle-type fittings.

Exception: Where approved by the jurisdiction, saddle-type fittings shall be permitted to connect the building sewer to a public sewer.

Section P3005.3 Horizontal drainage piping slope. Minimum horizontal drainage piping shall be installed in uniform alignment at uniform slopes not less than ¼ unit vertical in 12 units horizontal (2-percent slope) for 2 ½ inch (64 mm) diameter and less, and not less than 1/8 unit vertical in 12 units horizontal (1-percent slope) for diameters of 3 inches (76 mm) or more.

Maximum horizontal drainage piping shall be installed in uniform alignment at uniform slopes not less than 1 ¼ unit vertical in 12 units horizontal (10-percent slope) for the drainage piping.

Section P3003.9.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B 137.3 or CSA B181.2 shall be applied to all joint surfaces. The joint shall be made while the cement is wet, and shall be in accordance with ASTM D 2855. Solvent-cement joints shall be installed above or below ground.

Section P3008.1 Sewage backflow. ~~Where the flood level rims of plumbing fixtures are connected to below the elevation of the manhole cover of the next upstream manhole in the private or 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. Plumbing fixtures having flood level rims above the elevation of the manhole cover of the next upstream manhole in the public sewer shall not discharge through a backwater valve.~~

~~Exception: In existing buildings, fixtures above the elevation of the manhole cover of the next upstream manhole in the public sewer shall not be prohibited from discharging through a backwater valve.~~

Table P3009.9 LOCATION OF SUBSURFACE IRRIGATION SYSTEM. The table has been modified to read and a note to table:

**TABLE P3009.9
LOCATION OF SUBSURFACE IRRIGATION SYSTEM**

ELEMENT	MINIMUM HORIZONTAL DISTANCE	
	STORAGE TANK (feet)	IRRIGATION DISPOSAL FIELD (feet)
Buildings	5	2 5
Lot line adjoining private property	5 15	5 15
Private Water Wells	50 ^a	100 50 ^a
Streams and lakes	50	50 25
French/Curtain Drain	15	15
Seepage pits	5	5
Septic Tanks	0 ^b	5
Water Service	5	5
Public water main	10	10
Public water well	300	300

- a. Distance shall be one hundred feet (100') if the soil percolates one inch (1") in less than five (5) minutes or is classified as a Group 1 soil in the separation range as identified by ODEQ.
- b. Distance shall be 50 feet from neighboring property of their septic tank.

P3112.2 Installation. Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drainboard height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest partition and then through the roof to the open air or may be connected to other vents at a point not less than six (6) inches (152 mm) above the flood level rim of the fixtures served. Drainage fittings shall be used on all parts of the vent below the floor level and a minimum slope of one-quarter (1/4) inch per foot (20.9 mm/m) back to the drain shall be maintained. The return bend used under the drain-board shall be a one (1) piece fitting or an assembly of a forty-five (45) degree (0.79 radius), a ninety (90) degree (1.6 radius) and a forty-five (45) degree (0.79 radius) elbow in the order named. Pipe sizing shall be as elsewhere required in this Code. The island sink drain, upstream of the return vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the foot vent.

Section E3402.2 Penetrations of fire-resistance-rated assemblies. Electrical installations in hollow spaces, vertical shafts and ventilation or air-handling ducts shall be made so that the possible spread of fire products of combustion will not be substantially increased. Electrical penetrations ~~into or~~ through fire-resistance-rated walls, partitions, floors or ceilings shall be protected by approved methods to maintain the fire-resistance rating of the element penetrated. Penetrations of fire-resistance-rated walls shall be limited as specified in Section R302.4 (300.21).

E3403.3 Listing and labeling. Electrical materials, components, devices, fixtures and equipment shall be listed for the application, in accordance with NFPA 70®, shall bear the label of an approved agency and shall be installed, and used, or both, in accordance with the manufacturer's installation instructions [110.3(B)].

(Reason: This section has been modified to add a requirement to comply with the 2014 Edition of the National Electrical Code® (NEC®, 2014), NFPA 70®.

Section 3404.7 Integrity of Electrical Equipment. This section has been modified to read:

Section 3404.7 Integrity of Electrical Equipment. Internal parts of electrical equipment, including busbars, wiring terminals, insulators and other surfaces, shall not be damaged or contaminated by foreign materials such as paint, plaster, cleaners or abrasives, and corrosive residues. There shall not be any damaged parts that might adversely affect safe operation or mechanical strength of the equipment such as parts that are broken; bent; cut; deteriorated by corrosion, chemical action, or overheating. Foreign debris shall be removed from equipment. Damaged materials, equipment, appliances, and devices shall not be reused unless such elements have been reconditioned, tested, and placed in good and proper working condition and approved by a Nationally Recognized Testing Laboratory (NRTL), or by the

manufacturer of the equipment. Electrical equipment damaged by natural or man-made events shall be reused only as recommended by the manufacturer of such equipment.
[110.12(B)]

Section E3405.2 Working clearances for energized equipment and panelboards. Except as otherwise specified in Chapter 34 through 43, the dimension of the working space in the direction of access to panelboards and live parts of other equipment likely to require examination, adjustment, servicing or maintenance while energized shall be not less than 36 inches (914 mm) in depth. Distances shall be measured from the energized parts where such parts are exposed or from the enclosure front or opening where such parts are enclosed. In addition to the 36 inch dimensions (914 mm), the work space shall not be less than 30 inches (762 mm) wide in front of the electrical equipment and not less than the width of such equipment. The work space shall be clear and shall extend from the floor or platform of 36 inches (914 mm) to a height of 6.5 feet (1981 mm) or the height of the equipment, whichever is greater. In all cases, the work space shall allow at least a 90-degree (1.57 rad) opening of equipment doors or hinged panels. Equipment associated with electrical equipment shall be permitted to extend not more than 6 inches (152 mm) beyond the front of the electrical equipment. [110.26 (A) (1), (2), (3)]

Exceptions: *Rest of the text within the 2015 IRC is unchanged.*

Section E3601.6.2 Service disconnect location. The service disconnecting means shall be installed at a readily accessible location either outside of a building or inside ~~nearest the point of entrance~~ within five feet (5') of the service conductors. Service disconnecting means shall not be installed in bathrooms. Each occupant shall have access to the disconnect serving the dwelling unit in which they reside.

Section E3702.3 Fifteen- and 20-ampere branch circuits. A 15- or 20-ampere branch circuit shall be permitted to supply lighting units, or other utilization equipment, or a combination of both. The rating of any one cord-and-plug connected utilization equipment not fastened in place shall not exceed 80 percent of the branch-circuit ampere rating. The total rating of utilization equipment fastened in place, other than luminaries, shall not exceed 50 percent of the branch-circuit ampere rating where lighting units, cord-and-plug connected utilization equipment is not fastened in place, or both, are also supplied. 20-ampere general purpose branch circuits shall supply a maximum of 10 outlets. 15-ampere general-purpose branch circuits shall supply a maximum of 8 outlets. [210.23(A) (1) and (2)]

E4206.4.1 Maximum voltage. Luminaries shall not ~~be installed for operation on supply circuits over 150 volts between conductors~~ operate above the low-voltage contact limit as defined in E4202.1. [680.23(A)(4)].

Amendment A-12

2015 International Existing Building Code

Part 5 – BUILDING REGULATIONS AND CODES

International Existing Building Code®, 2015 Edition (IEBC®, 2015)

Part 5, Chapter 12 “*International Existing Building Code*”

The following sections, paragraphs, and sentences of the *2015 International Existing Building Code* are hereby amended as follows: Standard type is text from the IEBC. Underlined type is text inserted. ~~Lined through type is deleted text from IEBC.~~

[A] 101.1 Title. These regulations shall be known as the *Existing Building Code* of City of Choctaw, hereinafter referred to as “this code”.

Section 406.2 Replacement window opening control devices. In Group R-2 or R-3 buildings containing dwelling units, window opening control devices complying with ASTM F 2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

{following listings that apply to the replacement window are unchanged}

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section ~~1029.2~~ 1030.2 of the International Building Code.

Section 408.3 Flood hazard areas. The building official shall reference Part 18, Chapter 2 of the City of Choctaw Code of Ordinances for flood hazard areas as established by Federal Emergency Management Agency.

Section 410.4.2 Complete change of occupancy. {Verbiage is unchanged}

7. At least one accessible family or assisted use toilet room shall be provided in accordance with Chapter 11 of the International Building Code.

702.6 Materials and methods. All new work shall comply with the materials and methods requirements in the *International Building Code*, *International Energy Conservation Code*, *International Mechanical Code*, National Electrical Code, and *International Plumbing Code*,

as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

Section 804.1 Scope. {Verbiage is unchanged}

For the purpose of fire sprinkler protection and fire alarm requirements included in this section, the work area shall be extended to include at least the entire tenant space or spaces bounded by walls capable of resisting the passage of smoke containing the subject work area, and if the work area includes a corridor, hallway, or other exit access, then such corridor, hallway, or other exit access shall be protected in its entirety on that particular floor level.

Section 804.3 Standpipes. Refer to Section 1103.6 of the Fire Code for retroactive standpipe requirements.

{Delete rest of Section 804.3.}

Section 805.3.1.1 Single-Exit Buildings. {Verbiage is unchanged}

4. ~~In Group R-4 Occupancies, the maximum occupant load excluding staff is 16.~~

805.3.1.2 Fire Escapes required. For other than Group I-2, where more than one exit is required an existing ~~or newly constructed~~ fire escape complying with section 805.3.1.2.1 shall be accepted as providing one of the required means of egress.

805.3.1.2.1 Fire Escape access and details. {Verbiage is unchanged}

1. {Verbiage is unchanged}
2. Access to a new fire escape shall be through a door...
3. {Verbiage is unchanged}
4. {Verbiage is unchanged}
5. In all building of Group E occupancy up to and including the 12th grade, building of Group I occupancy, ~~rooming~~ boarding houses, and childcare centers, ladders of any type are prohibited on fire escapes used as a required means of egress.
6. {Verbiage is unchanged}
7. {Verbiage is unchanged}
8. {Verbiage is unchanged}
9. {Verbiage is unchanged}
10. {Verbiage is unchanged}

Section 904.1 Automatic sprinkler system. {Verbiage is unchanged}

For the purpose of fire sprinkler protection and fire alarm requirements included in this section, the work area shall be extended to include at least the entire tenant space or spaces bounded by walls containing the subject work area, and if the work area includes

a corridor, hallway, or other exit access, then such corridor, hallway, or other exit access shall be protected in its entirety on that particular floor level.

1401.2 Applicability. Structures existing prior to January 1, 2018 in which there is work involving additions, alterations or changes of occupancy shall be made to conform to the requirements of this chapter or the provisions of Chapters 5 through 13. The provisions of Sections 1401.2.1 through 1201.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be in Groups A, B, E, F, I-2, M, R, S. These provision shall not apply to buildings with occupancies in Group H or I-1, I-3, I-4.

Amendment A-13

2015 International Property Maintenance Code

Part 5 – BUILDING REGULATIONS AND CODES

International Property Maintenance Code®, 2015 Edition (IPMC®, 2015)

Part 5, Chapter 13 “*International Property Maintenance Code*”

The following sections, paragraphs, and sentences of the *2015 International Property Maintenance Code* are hereby amended as follows: Standard type is text from the IPMC. Underlined type is text inserted. ~~Lined through type is deleted text from IPMC.~~

R101.1 Title. These regulations shall be known as International Property Maintenance Code of the City of Choctaw, hereinafter referred to as “this code”.

[A] 102.3 Application of other codes. Repairs, additions, or alterations to a structure, or changes of occupancy, shall be done in accordance with the procedures and provisions of the International Building Code, ~~International Energy Conservation Code~~, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Residential Code, International Plumbing Code, National Electric Code and NFPA 70. Nothing in this code shall be construed to cancel, modify, or set aside any provisions of the International Zoning Code, Choctaw Code of Ordinances.

[A] 103.5 Fees. The fees for activates and services performed by the department in carrying out its responsibilities under this code shall be indicated in the ~~following schedule~~ adopted fee schedule by the City Council.

Journal Record Publishing Company

101 N Robinson Suite 101
Oklahoma City, OK 73102

PUBLISHER'S AFFIDAVIT

Page 1 of 1

PUBLIC HEARING
12/06/2017
PERTAINING TO ADOPTION OF THE 2015 BUILDING CODES

NUMBER

PUBLICATION DATES

LEGAL NOTICE

STATE OF OKLAHOMA



S.S.

COUNTY OF OKLAHOMA

I, of lawful age, being duly sworn, am a legal representative of The Journal Record of Oklahoma City, Oklahoma, a daily newspaper of general circulation in Oklahoma County, Oklahoma, printed in the English Language and published in the City of Oklahoma City, in Oklahoma County, State of Oklahoma, continuously and uninterrupted published in the County for a period of more than 104 consecutive weeks prior to the first publication of the attached notice, and having a paid general subscription circulation therein and with admission to the United States mails as paid second-class mail matter.

That said notice a true copy of which is attached hereto, was published in the regular edition of said newspaper during the period and time of publication and not in a supplement on the ABOVE LISTED DATE(S).

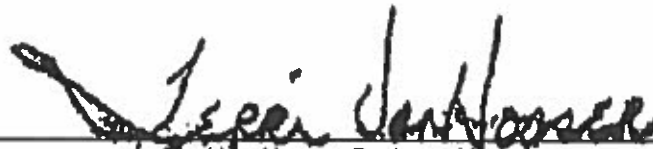
(MS11452296)
PUBLIC HEARING
A Public Hearing will be held on Tuesday, December 21, 2017, at 7:00 p.m., with the City Council, City Hall, 2500 North Choctaw Road, regarding a proposed Ordinance adopting rules and regulations for the City of Choctaw by adding amendments to Part 5 of the Choctaw Code of Ordinances pertaining to adoption of the 2015 Building Codes.

Any person wishing to appear in support or in opposition to the proposed changes may do so at the Public Hearing. All written protests must be filed with the City Clerk by 5:00 p.m. at least three (3) business days prior to the scheduled Public Hearing. Mailing address is P.O. Box 567. For further information, please contact Chad Denson at Choctaw City Hall at 390-8198.

Tina Rodriguez
City Clerk

(SEAL)
ATTEST:

(12-6-17)

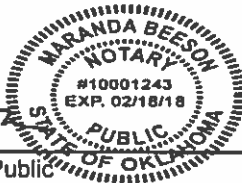


Terri VanHooser, Business Manager

Subscribed and sworn before me this 6th day of December, 2017



MaRanda Beeson, Notary Public



Comission Number: 10001243
My Comission Expires: 2/18/2018

Order Number

11452296

Publisher's Fee

\$ 21.40

Journal Record Publishing Company

101 N Robinson Suite 101
Oklahoma City, OK 73102

PUBLISHER'S AFFIDAVIT

Page 1 of 1

PUBLIC HEARING

01/19/2018

AS TO PROPOSED AMENDMENTS TO PART 5 OF THE
CHOCTAW CITY CODE PERTAINING TO BUILDING CODES

NUMBER

PUBLICATION DATES

LEGAL NOTICE

STATE OF OKLAHOMA

COUNTY OF OKLAHOMA

} S.S.

I, of lawful age, being duly sworn, am a legal representative of The Journal Record of Oklahoma City, Oklahoma, a daily newspaper of general circulation in Oklahoma County, Oklahoma, printed in the English Language and published in the City of Oklahoma City, in Oklahoma County, State of Oklahoma, continuously and uninterruptedly published in the County for a period of more than 104 consecutive weeks prior to the first publication of the attached notice, and having a paid general subscription circulation therein and with admission to the United States mails as paid second-class mail matter.

That said notice a true copy of which is attached hereto, was published in the regular edition of said newspaper during the period and time of publication and not in a supplement on the ABOVE LISTED DATE(S).

(MS11474775)

PUBLIC HEARING

A Public Hearing will be held on Tuesday, February 6, 2018, at 7:00 p.m., with the City Council, City Hall, 2500 North Choctaw Road, regarding a proposed Ordinance adopting rules and regulations for the City of Choctaw by adding amendments to Part 5 of the Choctaw Code of Ordinances pertaining to adoption of the 2015 Building Codes.

Any person wishing to appear in support or in opposition to the proposed changes may do so at the Public Hearing. All written protests must be filed with the City Clerk by 5:00 p.m. at least three (3) business days prior to the scheduled Public Hearing. Mailing address is P.O. Box 567. For further information, please contact Chad Denson at Choctaw City Hall at 390-8198.

Tina Rodriguez
City Clerk

(Seal)
ATTEST:

(1-19-18)



Terri VanHooser, Business Manager

Subscribed and sworn before me this 19th day of January, 2018



MaRanda Beeson, Notary Public



Comission Number: 10001243

My Comission Expires: 2/18/2018

Order Number

11474775

Publisher's Fee

\$ 21.40

Journal Record Publishing Company

101 N Robinson Suite 101
Oklahoma City, OK 73102

PUBLISHER'S AFFIDAVIT

Page 1 of 1

OPEN FORUMS
12/29/2017
AS TO PROPOSED CHANGES AND ADOPTION OF THE 2015 BUILDING CODES

NUMBER

PUBLICATION DATES

LEGAL NOTICE

STATE OF OKLAHOMA

} S.S.

COUNTY OF OKLAHOMA

I, of lawful age, being duly sworn, am a legal representative of The Journal Record of Oklahoma City, Oklahoma, a daily newspaper of general circulation in Oklahoma County, Oklahoma, printed in the English Language and published in the City of Oklahoma City, in Oklahoma County, State of Oklahoma, continuously and uninterruptedly published in the County for a period of more than 104 consecutive weeks prior to the first publication of the attached notice, and having a paid general subscription circulation therein and with admission to the United States mails as paid second-class mail matter.

That said notice a true copy of which is attached hereto, was published in the regular edition of said newspaper during the period and time of publication and not in a supplement on the ABOVE LISTED DATE(S).

(MS11464008)

PUBLIC OPEN FORUM

A series of Open Forum meetings to discuss the proposed changes and adoption of the 2015 Building Codes will be held on the following dates and times:

Wednesday, January 17th, from 2pm-4pm, to discuss the 2015 International Residential Code (IRC).

Thursday, January 18th, from 2pm-4pm, to discuss the 2015 International Plumbing Code (IPC), the 2015 International Mechanical Code (IMC), the 2014 National Electric Code (NEC), and the 2015 International Fuel Gas Codes (IFGC).

Friday, January 19th, from 2pm-4pm, to discuss the 2015 International Building Code (IBC) and the 2015 International Fire Code (IFC).

Saturday, January 20th, from 10am-12pm and a second session from 2pm-4pm, for an open discussion on all of the codes.

All of the above meetings will be held at City Hall, 2500 North Choctaw Road. For further information, please contact Chad Denson at Choctaw City Hall at 390-8198.

Tina Rodriguez
City Clerk

(Seal)

ATTEST:

(12-29-17)


Terri VanHooser, Business Manager

Subscribed and sworn before me this 29th day of December, 2017



MaRanda Beeson, Notary Public



Comission Number: 10001243
My Comission Expires: 2/18/2018

Order Number

11464008

Publisher's Fee

\$ 28.07

Journal Record Publishing Company

101 N Robinson Suite 101
Oklahoma City, OK 73102

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Page 1 of 1

PUBLIC HEARING
12/29/2017
AS TO A PROPOSED ORDINANCE ADOPTING AMENDMENTS TO BUILDING CODE

NUMBER

PUBLICATION DATES

LEGAL NOTICE

STATE OF OKLAHOMA

} S.S.

COUNTY OF OKLAHOMA

I, of lawful age, being duly sworn, am a legal representative of The Journal Record of Oklahoma City, Oklahoma, a daily newspaper of general circulation in Oklahoma County, Oklahoma, printed in the English Language and published in the City of Oklahoma City, in Oklahoma County, State of Oklahoma, continuously and uninterruptedly published in the County for a period of more than 104 consecutive weeks prior to the first publication of the attached notice, and having a paid general subscription circulation therein and with admission to the United States mails as paid second-class mail matter.

That said notice a true copy of which is attached hereto, was published in the regular edition of said newspaper during the period and time of publication and not in a supplement on the ABOVE LISTED DATE(S).

(MS11464007)

PUBLIC HEARING

A Public Hearing will be held on Thursday, January 18, 2018, at 7:00 p.m., with the City Council, City Hall, 2500 North Choctaw Road, regarding a proposed Ordinance adopting rules and regulations for the City of Choctaw by adding amendments to Part 5 of the Choctaw Code of Ordinances pertaining to adoption of the 2015 Building Codes.

Any person wishing to appear in support or in opposition to the proposed changes may do so at the Public Hearing. All written protests must be filed with the City Clerk by 5:00 p.m. at least three (3) business days prior to the scheduled Public Hearing. Mailing address is P.O. Box 567. For further information, please contact Chad Denson at Choctaw City Hall at 390-8198.

Tina Rodriguez
City Clerk

(Seal)
ATTEST:

(12-29-17)



Terri VanHooser, Business Manager

Subscribed and sworn before me this 29th day of December, 2017



MaRanda Beeson, Notary Public



Comission Number: 10001243
My Comission Expires: 2/18/2018

Order Number

11464007

Publisher's Fee

\$ 21.40

Summary

The City of Choctaw (City) is evaluating the 2015 International Codes and the 2014 National Electrical Code (Codes) with local amendments. Currently the City is under the 2009 International Codes and 2011 National Electrical Code. The updated Codes have some revisions and implement standards on construction items such as the safety, framing, foundation, efficiency of heating and cooling, ventilation, fuel gas, plumbing and electrical components.

Background

The State of Oklahoma (State) and the City of Choctaw have enforced building codes since the late 1970's, early 1980's. Since that time construction materials and methods have improved technology, increased energy efficiency, safety, and provided more protection to property.

Just in the short time of six years, since the 2009 adoptions, construction materials and engineering design have advanced and increased safety to oneself and property. Changes included more efficient heating and cooling systems, better insulation of a structure, lower cost while improving ventilation, increased safety and efficiency of an electrical system, and improvement of construction materials for the foundations and framing of a structure. Since the 2009 adoptions the construction field has continued to evolve. As a result of the changes in the construction field, building codes have to evolve with those advancements to ensure proper construction installation and materials are being implemented.

Updates

The updating of the 2015 International Codes and the 2014 National Electrical Code will lower a property owners home and property insurance, provide a safer atmosphere, and allow new technologies to be installed. These changes within the Codes will conform to today's advancements by being more efficient, possibly cost saving and possibly lower the maintenance cost for the life of a building.

Notification

The City of Choctaw is to review and evaluate the first published series of the items below:

- 2015 International Building Code (2015 IBC);
- 2015 International Fire Code (2015 IFC);
- 2015 International Mechanical Code 2015 (IMC);
- 2014 National Electric Code (2014 NEC);
- 2015 International Plumbing Code (2015 IPC);
- 2015 International Fuel Gas Code (2015 IFGC);
- 2015 International Residential Code (2015 IRC);
- 2015 International Existing Building Code (2015 IEBC); and
- 2015 International Property Maintenance Code (2015 IPMC).

The City staff has proposed amendments to the codes listed above. The proposed amendments are available at City Hall, on the City web page, and posed on information technology. City staff has educated some contractors, notified the Chamber of Commerce, emailed documents, provided hard copies, posted on the web page and posted on social apps to inform the public.

To provide better education and input for the public, staff has posted the amendments, provided a free source to look at majority of the entire published Code books on the City web page, physical published books are available at City Hall and comments can be submitted by anybody who has questions, comments, or concerns. To allow the public to address the government body, the City Council will have three public hearing at 7:00 p.m. located at City Hall, 2500 N. Choctaw Rd, Choctaw, OK 73020 on the said dates:

- Tuesday, December 19, 2017;
- Tuesday, January 16, 2018; and
- Tuesday, February 6, 2018.

In addition to the available information and public hearings, staff is to hold several open forums to discuss the Codes. The events will be located at City Hall, 2500 N. Choctaw Rd, Choctaw, OK 73020. These events are to discuss specific codes. Dates and times of the open form is to occur:

- Wednesday, January 17, 2018 @ 2:00 – 4:00 p.m. (Discussions over the 2015 IRC)
- Thursday, January 18, 2018 @ 2:00 – 4:00 p.m. (Discussions over the 2015 IPC, 2015 IFGC, & 2015 IMC)
- Friday, January 19, 2018 @ 2:00 – 4:00 p.m. (Discussions over the 2015 IBC, 2015 IFC, & 2014 NEC)
- Saturday, January 20, 2018 @ 10:00 – 12:00 a.m. (Open discussion of any proposed codes)
- Saturday, January 20, 2018 @ 2:00 – 4:00 p.m. (Open discussion of any proposed codes)

The dates and times listed above for the public hearings and open forms will be posted on the City web site, placed on social media, and posted in the "Journal Record" and the "Choctaw Times". The forms of communication is to make the public aware of the changes and allow them to provide any concerns or questions to the local government body.

Local Amendments

The proposed International and National Electrical Codes establishes the minimum standard for installation and construction. The State and the local jurisdiction (City of Choctaw) can add more detail or require a higher standard. These amendments allow a better understanding of a definition(s), can provide a more defined standard, or compliment the regional practices and installations.

The State of Oklahoma and City of Choctaw added amendments to the proposed Codes. The City of Choctaw's proposed amendments can be found on the City web page (<http://choctawcity.org/proposed-building-code-changes/>) or hard copies are available at City Hall.

The proposed text modifications of a specific code are available on the City web page, City Hall, or by request (ph. 405-390-8198 or cdenson@choctawcity.org). The changes are identified by a strikethrough or underline text features. Any verbiage that has a ~~strikethrough~~ will indicate that specific text has been removed from the code section. Any verbiage that has an underline will indicate the added information to an individual code section.

In addition to the added and removed text, the City's amendments are identified by a **yellow highlight** to indicate amendments proposed by the City of Choctaw. The un-highlighted amendment text are the adopted amendments by the State of Oklahoma.

Listed below are some examples of codes changes by the State of Oklahoma:

- Defining a "Safe Room";
- Establishing a larger distance of five feet versus thirty inches for a building drain to protect a buildings foundation;

- Keep the energy conservation standard to the current practices of the region;
- Water service has to extend away from a foundation of 30 inches versus against the foundation;
- Sprinkler suppression systems for a townhouse;
- Establish guard rails for roof edge;
- Establish hatch door dimensions for a roof;
- Exception for footing on a specific size of an accessory building; and
- Remote and manual shut off for fuel stations.

Listed below are some examples of codes changes by the City of Choctaw:

- Defining the word "Kitchen" to establish what is required for dwelling;
- Defining the word "Outdoor Kitchen" to separate the use from a dwelling;
- Provide an exception for exhaust hoods make up air;
- Establish lawn irrigation regulations to separate those installments from the regular plumbing code;
- Establish a fire apparatus access road; and
- Footers for a propane tank.

Adoption

After consideration and input from the public, the City Council will consider the adoption of the Codes and amendments. The set hearing date to consider adoption will occur on February 6, 2018 at 7:00 p.m. located at City Hall. If approved by the City Council, the adoption date for the Codes and amendments will occur on after City Council's adjournment on February 6, 2018.

Any existing permits or building submittals prior to the February 6th, 2018, will be constructed under the 2009 International Codes and 2011 National Electric Code. After the February 6, 2018 acceptance date any construction, existing permits, or new submittals can build under the 2009 or 2015 International Codes and 2011 or 2014 National Electric Code until April 1st, 2018. **On April 2nd, 2018** any projects permitted on this date or after shall follow the 2015 International Codes and the 2014 National Electrical Code. Any permits issued prior to April 2nd, 2018, may follow the 2009 International Codes and 2011 National Electrical Code.

Contact

Chad Denson
 Development Service Director
 City of Choctaw
 2500 N. Choctaw Road
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 Choctaw, OK 73020
 Ph.: (405) 390-5136
 Fax: (405) 390-3332
 Email: cdenson@choctawcity.org

Kevin Moore
 Building Inspector
 City of Choctaw
 2500 N. Choctaw Road
 PO Box 567
 Choctaw, OK 73020
 Ph.: (405) 281-6850
 Fax: (405) 390-3332
 Email: kmoore@choctawcity.org

107.7 Extension of time agreement. If the code official determines that an extension of time will not create or perpetuate a situation imminently dangerous to life or property, the code official may grant an extension of time, not to exceed 180 days, in which to complete the work listed in the Notice and Order. Any extension shall not extend the time to appeal the Notice and Order. Any extension shall be agreed in writing in a documentation containing the following:

1. A reasonable and acceptable schedule, setting forth specific dates to complete corrective action for each violation listed in the Notice and Order.
2. A signature of the responsible party.

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the International Building Code, International Existing Building Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Residential Code, ~~International Zoning Code~~, National Electric Code, City of Choctaw Code of Ordinance, or NFPA 70, such terms shall have the meaning as described to them as stated in codes.

SECTION 2. Repealer. All former Ordinances or parts of Ordinances conflicting or inconsistent with the provisions of this Ordinance are hereby repealed.

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

SECTION 4. Emergency. Whereas, it being immediately necessary for the preservation of the public health, peace and safety of the City of Choctaw and the inhabitants thereof, an emergency is hereby declared to exist, by reason whereof, this Ordinance shall be in full force and effect from and after its passage and approval, as provided by law.

PASSED and APPROVED and the Emergency Clause voted upon separately by the Mayor and City Council of the City of Choctaw, Oklahoma, this 20th day of March, 2018.



Mayor



ATTEST:



City Clerk

APPROVED AS TO FORM this 19th day of March, 2018.



City Attorney