

2018 INTERNATIONAL FIRE CODE

Chapter 1 – Scope and Administration

Section 101.1 Title (Amended): The Fire Code of the City of Town and Country (“Fire Code”) shall consist of:

1. The International Fire Code, 2018 Edition, one (1) copy of which is on file in the office of the City Clerk of the City of Town and Country.
2. The amendments to the International Fire Code, 2018 Edition, set forth herein. The International Fire Code, 2018 Edition, is referred to herein as the “code”.

SECTION 109 BOARD OF APPEALS. (Amended): The Board of Adjustment shall hear all appeals from decisions of the Fire Marshal made in the administration of the code, as described in Appendix B of the International Building Code as adopted by the City of Town and Country.

Section 109.1 through 109.3. Delete.

110.4 Violation penalties. (Amended): Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the Fire Code Official, or of a permit or certificate used under provisions of this code, shall be guilty of an ordinance violation, punishable by a fine of not more than one thousand dollars (\$1,000.00) or by imprisonment not exceeding ninety (90) days, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

112.4 Failure to comply. (Amended): Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not more than one thousand dollars (\$1,000.00). Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Chapter 2 – Definitions

Section 202 General Definitions. (Addition):

Term or Phrase	Meaning to be Ascribed Thereto
Building Code	Article I of Chapter 500 of the Town and Country Municipal Code
Chief appointing authority	Mayor
Chief authority of the municipality	Mayor
City	City of Town and Country
Fire Department	The City’s Fire Department
Fire Prevention Bureau	The Fire Department
Legal representative of the City	City Attorney or the City Prosecuting Attorney
Local jurisdiction	City of Town and Country

Residential Building Code	Article VII of Chapter 500 of the Town and Country Municipal Code
The jurisdiction	City of Town and Country

Chapter 5 – Fire Service Features

503.7 Design Vehicle – Apparatus. (Addition): The Design Vehicle for the purposes of turning radii, access and other site plan considerations shall be the largest apparatus currently in-service or under order by the West County EMS & Fire Protection District or any of its mutual aid partners, however under no circumstances shall the design vehicle be smaller than a custom – manufacturer produce aerial ladder truck with tandem rear axles, a 105’ platform, weighing at least Ninety Thousand (90,000) Pounds and with dimensions of at least nine feet (9’) wide, thirteen feet six inches (13’6”) in height and forty-five feet (45’) in length.

507.5.7 Color coding of public fire hydrants. (Addition): All public fire hydrants shall be painted yellow. All fire hydrant bonnets are to be painted as follows:

Color	Water Main Size
Green	Twelve (12) inch and larger
Orange	Eight (8) and Ten (10) inch
Red	Six (6) inch and smaller

507.5.8 Color coding of private fire hydrants. (Addition): All private fire hydrants shall be painted yellow, including the bonnet.

Chapter 7 – Fire and Smoke Protection Features

704.2.1 Fire Caulk (Addition): Wherever fire caulk is required as a fire block, fire stop or necessary to maintain the integrity of a wall rating, the fire caulk shall meet a UL 1479 or UL 2079 standard. Expedent tubes must be maintained on a jobsite for inspection as part of any permit. If the inspector is unable to verify the product used, reapplication with a verified product may be required.

704.2.2 Fire Foam (Addition): Fire foam may not be used as a fire block, fire stop or as part of any rated wall or building assembly.

Chapter 9 – Fire Protection and Life Safety Systems

903.5.1 Water flow tests. (Addition): Water flow tests for automatic sprinkler systems shall be conducted between the hours of 9:00 a.m. and 4:30 p.m., Monday through Friday. Tests shall be within the last twelve (12) months.

903.7 Post indicator valves. (Addition): All automatic sprinkler systems, except limited area sprinkler systems, shall be provided with a post indicator valve that shall control the water supply to all automatic sprinkler systems in that building.

907.11 Monitoring. (Addition): All fire alarm and detection systems shall be monitored by an approved central station as defined in NFPA 72. Effective January 1, 2015, the central station service shall be UL Listed for all new alarm installations or changes in alarm service provider for existing alarm systems.

Exception: Supervisory is not required for:

1. Single-and multiple-station smoke alarms required by Section 907.2.10
2. Smoke detectors in Group I-3 occupancies.
3. Automatic sprinkler systems in one-and two-family dwellings.

907.12 Fire Alarm Automatic Notification. (Addition): Any commercial building with a fire alarm or fire suppression system shall have a monitored fire alarm system that automatically notifies the monitoring service (and 9-1-1 Dispatch via that service) of the activation of the fire alarm, including specific details as to the nature of the alarm. The system shall also feature notification devices in all public areas of the building.

907.13 Qualifying Systems. (Addition): A fire alarm or fire suppression system shall be defined as any local fire alarm or extinguishment system regulated by the International Fire Code including Type 1 hoods.

907.14 Remote Annunciator. (Addition): If a fire alarm panel is not installed in the immediate vicinity of the main public entrance, a remote annunciator shall be installed in the main lobby or in the immediate vicinity of the main public entrance. The remote annunciator shall be capable of full control of the alarm system, including viewing active alarms, trouble alarms and faults and shall be capable of silencing and resetting the alarm system.

907.15 Fully Addressable Alarm Systems. (Addition): All new installations of fire alarm systems shall feature a fully addressable alarm system identifying each detector by a description of its physical location.

907.16 Devices Similar to Fire Alarm Prohibited. (Addition): No commercial building shall have any device or system not part of a monitored fire alarm system that provides audible and or visual warning that could be reasonably mistaken for a fire alarm system or otherwise provide an indication that an automatic fire response is or will be underway.

907.17 Fire Alarm Dialer. (Addition): All new installations of fire alarm systems and replacement of fire alarm panels shall feature a fire alarm dialer that is capable of transmitting detailed data to the alarm monitoring service, including the alarm type, alerting device location and a description of the device/and or nature of the specific alarm (i.e. smoke, heat ,water flow, etc.).

907.18 Alarm Transmission Time Defined. (Addition): All fire alarm signals shall be transmitted to the remote monitoring service within 90 seconds per NFPA 72-16. Additionally, the alarm service shall transmit the alarm signal, and all other identifying point information to Central County 911 Dispatch within 90 seconds of the alarm monitoring service receipt of the alarm.

907.19 Pre-Test of Alarm System. (Addition): All fire alarm systems under permit for the modification or installation of a fire alarm system shall be pre-tested prior to requesting a final inspection. Signed pre-test documentation shall be provided to the Fire Marshal upon their arrival for the final inspection. Failure to have the appropriate documentation will cancel the final alarm inspection and require rescheduling.

907.20 Signing. (Addition): The room containing the Fire Alarm Control Panel (FACP) shall be clearly marked with a sign. The sign shall have the legend "FACP" in white letters 6 inches in height on a red retro-reflective background. The sign shall be permanently affixed to the door on the room containing the FACP, the nearest exterior door providing access to the building from outside and on any doors and long any corridors leading between the exterior door and the room containing the FACP as necessary.

907.21 Trouble Signals. (Addition): A fire alarm that experiences a Supervisory or Trouble signal shall be serviced by a qualified technician within 2 business days unless directed to be done sooner by the Fire Marshal.

912.8 Use Groups R-3 and R-4. (Addition): There shall be no more than six (6) dwelling units constructed prior to the installation of a public water system with fire hydrants as set forth herein so as to be accessible for Fire District use in the event of a fire emergency.

912.9 Other Use Groups. (Addition): In all other Use Groups, public water systems with fire hydrants shall be installed with commencement of construction.

912.10 Fire Hydrant Placement. (Addition): Fire hydrants shall be placed within the guidelines of Section 912.10 through 912.10.9.

912.10.1 Single Family Residential. (Addition): In Use Groups R-2 and R-4, single family residential developments, fire hydrant spacing shall not exceed six hundred (500) feet from hydrant to hydrant, or as special site conditions may dictate.

912.10.1.1 Water Supply Required. (Addition): In Use Groups R-3 and R-4 single-family developments, when the density is one (1) dwelling unit per ten thousand (10,000) square feet of developed property or less and there are five (5) or more dwelling units in a single development.

912.10.2 Multi-Family Residential. (Addition): In Use Group R-2, multi-family residential developments, fire hydrant spacing shall not exceed four hundred (400) feet from hydrant to hydrant, or as special site conditions may dictate. Local conditions may be such that this distance may vary as much as 75 to 100 feet in either direction.

912.10.2.1 Water Supply Required. (Addition): In Use Group R-2 multi-family residential developments, when there are four (4) or more dwelling units within one (1) building or structure.

912.10.3 Other Use Group Development. (Addition): In all other Use Groups, fire hydrant spacing shall not exceed four hundred (400) feet from hydrants to hydrant, or as special site conditions may dictate. No part of a building shall be more than four hundred (400) feet from a fire hydrant. Local conditions may be such that the distance between fire hydrants or from a building to a fire hydrant may vary as much as 75 to 100 feet in either direction, if otherwise approved by the Fire Marshal.

912.10.4 Area to be provided with Fire Hydrants. (Addition): Fire hydrants and water mains shall be placed along the full length of the property to be developed that abuts an existing and/or proposed improved public way. Considerations may be required by the water agency because of water quality considerations.

912.10.5 Fire Hydrants. (Addition): Spacing of fire hydrants along a public way shall be regulated by the Use Group classification of the development that abuts the existing and/or proposed public way.

912.10.6 Private Hydrants. (addition): Where a development, other than Use Group R-3 or R-4, is greater than one hundred fifty (150) feet from an existing and/or proposed improved public way, measured along the drivable access, additional private fire hydrants shall be required on said developed property, private streets and/or parking lots, at a spacing between fire hydrants as required by the Use Group as set forth in Section 912.6.4

912.10.7 No Parking Area at Fire Hydrants. (Addition): Where fire hydrants are required to be installed in areas where vehicles would be parked or standing, said vehicle parking or standing shall be restricted for ten (10) feet in each direction from the fire hydrant.

912.10.8 Unacceptable Locations for Fire Hydrants. (Addition): Fire hydrants shall not be permitted in the locations indicated in Section 912.6.8.1.

912.10.8.1 Prohibited Locations. (Addition): A fire hydrant shall not be placed at any location where the fire hydrant could be damaged by vehicular traffic.

912.10.9 Relocation of Fire Hydrants. (Addition): Relocation of fire hydrants requested or required by a property owner and/or developer shall be located as specified by the water agency's policies and procedures and approved by the Fire Marshal.

912.11 Fire Hydrant Installation. (Addition): All fire shall be installed in accordance with Section 912.11.1 through 912.11.3

912.11.1 Fire Hydrant Set Back Distance. (Addition): All fire hydrants shall be set back from the curb or edge of pavement. The setback exceeds twelve (12) feet.

912.11.2 Fire Hydrant Connection Height. (Addition): Fire hydrants shall be installed a minimum of fourteen (14) inches and maximum of thirty six (36) inches above finished grade, measured from the center of the steamer connection.

912.11.3 Fire Hydrant Type. (Addition): All fire hydrants shall be approved by the American Water Works Association (AWWA) and/or Missouri American Water.

912.12 Obstructions. (Addition): There shall be no obstructions, plantings, bushes, trees, signs, light standards, etc. within six (6) feet of any fire hydrant in all directions.

912.13 Minimum Fire Flow – Single Hydrant. (Addition): The minimum fire flow from a single fire hydrant in any Use Group shall be fifteen hundred (1500) gallons per minute at twenty (20) psi residual pressure unless the new hydrant is ordered on a pre-existing main.

912.14 Minimum Fire Flow – Next Two Hydrants. (Addition): The minimum fire flow from the next two fire hydrants in any Use Group shall be a cumulative fifteen hundred (1500) gallons per minute at twenty (20) psi residual pressure.

912.15 Size. (Addition): Fire Department Connections (FDC) shall consist of a five inch (5') Storz connection into a minimum five inch (5') piping system. The piping system from the FDC to the main sprinkler system piping shall be a minimum of five inches (5') in diameter. The Storz connection shall be installed on a 30 degree angle.

912.16 Location. (Addition): Fire Department Connections (FDC) shall be located no more than 75 feet from a hydrant capable of a minimum flow of 1500 GPM and shall be located no more than ten feet (10') from a paved surface capable of supporting a Ninety Thousand Pound (90,000#) aerial fire apparatus.

912.17 Walkway. (Addition): A walkway shall be provided between the paved apparatus access and the FDC. The walkway shall be of hot-placed asphalt pavement or of poured-in-place concrete and shall be a minimum of 36 inches in width.

912.18 Visibility. (Addition): The Fire Department Connection (FDC) shall be clearly marked with a sign. The sign shall have the legend "FDC" in white letters six inches (6') in height on a red-retro-reflective background. The sign shall be permanently affixed to the building above the FDC. The FDC shall be visible from the apparatus access area and shall not be obstructed by any landscaping or other concealment device.

912.19 Residual Pressure. (Addition): Fire flow demand calculations shall require a 20% reserve at system design demand; however the residual shall be at least 20 psi. The Fire Marshal may require a higher residual at their discretion if special circumstances warrant.

912.20 Fire main Definition. (Addition): Any water main installed as part of any public or private construction project that directly serves one or more fire sprinkler systems shall be considered a Fire Main and shall be installed and inspected to NFPA standards.

912.20.1 Fire Main Sizing. (Addition): Fire mains shall be sized according to required demand; however no fire main shall be sized less than as required below without specific approval from the Fire Marshal.

912.20.2 Fire Main Tied-In at 2 or More Locations. (Addition): Fire mains tied into the Missouri American water system at 2 or more locations shall use a minimum 6" diameter pipe.

912.20.3 Fire Mains Tied-In at 1 Location. (Addition): Fire mains tied into the Missouri American water system at only one location shall use a minimum of 8" diameter pipe.

912.20.4 Fire Mains Not to Connect to Smaller Service Main. (Addition): Fire mains required to be sized at a certain minimum size shall not be supplied from water service mains of a smaller diameter.

APPENDIX

Appendix A – Delete

Appendix B – Delete

Appendix C – Delete

Appendix D – Fire Apparatus Access Roads

D102.1 Access and loading (Amended): Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing up to ninety thousand (90,000) pounds.

D102.2 Fire Lane Designation (Addition): Fire lanes shall be located as necessary to ensure access for fire and emergency medical services. Fire lanes shall be designated by the Fire Marshal. Fire lanes must be maintained to full compliance for any adjacent buildings to pass new occupancy and/or annual inspection.

D102.3 Maintenance and Repair (Addition): It shall be the responsibility of the property owner to install and maintain Fire Lanes. Active pavement and/or curb repairs shall have the markings restored upon completion of repair work, however no fire lane markings shall be absent for more than thirty (30) calendar days due to repairs.

D103.3.1 Cul-De-Sacs (Addition): New public and private residential streets with a cul-de-sac less than ninety-six feet (96') in diameter shall be built without any island, median or other obstruction in the center of the cul-de-sac.

D103.5 Fire Apparatus Access Road Gates. (Amended): Gates meeting the conditions described hereinafter may be accepted from the application of D103.5.1. In such case a developer, owner, Board of Trustees, may install a gate if first approved by the Fire Marshal. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. That the gate to be erected is at least forty (40) feet back from the edge of the cross street from which access to the gated road is obtained.
2. The minimum gate width shall be twenty (20) feet or have net clear opening of twelve (12) feet for single lane access.
3. Gates shall be of the swinging or sliding type. Construction of gates shall be of materials that allow manual operation by one (1) person from the public side of the gate.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of a Fire Department Master Key – Rapid Entry Knox System.
6. Locking device specifications shall be submitted for approval by the Fire Marshal.
7. Electric gates shall be equipped with a means of opening the gate by Fire Department personnel for emergency access. Emergency opening devices shall be approved by the Fire Marshal.
8. That the developer and/or Board of Trustees, its successors and assigns of the subdivision install an entry-operated switch through the Knox Box System, known as a “rapid entry system”, approved by the Fire Marshal.
9. All developers or trustees shall install a lock box of adequate size so that all keys needed to gain access to the exterior and interior designated areas (such areas designated for common use and /or all service equipment area) shall be accessible at all times. Owners shall clearly mark all keys within the lock box and shall indicate doors to which such keys belong. All tags, marking systems, location and size of lock box, shall be at the discretion of and with the approval of the Fire Marshal.
10. The developer or trustee of said development shall install the lock box system according to the manufacturers’ recommendations and direction, and at the direction and approval of the Fire Marshal.
11. The developer or trustee of said development shall be responsible for any key changes and additions to the plan, or plat filed with the Fire Marshal, and it shall be the responsibility of the owner to notify the Fire Marshal, in writing, of any changes or additions required in or to the lock box.
12. The cost of purchase, installation and maintenance of the lock box security system shall be the responsibility of the developer and/or trust of the subdivision.
13. That the gate shall have installed a power failure override and spring design system which will open the gates in the event of an electric power failure and/or pull pin system.
14. That the developer or Board of Trustees of the subdivision shall agree to keep the gates open at all times during inclement weather.
15. That the developer or Board of Trustees of the subdivision agrees to incorporate and adopt in their indenture of subdivision restrictions a provision accepted by the City. The provision must hold the City, its agents and employees harmless from any and all liability as a result of increased response time directly resulting from the gated community and the system described and/or damage to gates in answering of an emergency call. The maintenance and cost of repair of the gates and supplies shall be at the sole cost of the subdivision.
16. To provide a means to manually release the gate from the electronically operated mechanism.

17. The trustees and/or property management shall notify the City of any change in the trustees or property Management Company.

D103.7 Street Obstructions (Addition): No person shall erect, construct, place or maintain any bumps, humps, fences, bars, pipes, wood or metal horse or any other type of obstruction in or upon any street within the City.

D103.7.1 Exception for Traffic Calming Devices as Part of Engineering Study (Addition): Where a private street or road exhibits a significant traffic safety concern, traffic calming devices may be allowed at the discretion of the Fire Marshal subject to the following:

- A. A traffic study has been performed by a licensed Professional Traffic Operations Engineer.
- B. The study is sealed by the same who shall be a licensed professional engineer in the State of Missouri.
- C. The traffic study identifies one of more specific problems, as verified through engineering study, where traffic calming devices are proposed by the traffic engineer as a likely solution.
- D. The installation and maintenance of the traffic calming devices is to be performed by a municipal, county or state agency under whose jurisdiction the maintenance of the driving surface lies.
- E. The responsible agency agrees to remove the traffic control devices if the Fire District finds that the devices adversely affect the Fire District's ability to provide adequate EMS & Fire protection services due to physical damage to the Fire District equipment or inability to adequately navigate the devise(s) or retain access to property.
- F. The devices do not require personnel to stop and exit the response apparatus to open, move or otherwise adjust the traffic calming device(s).
- G. The devices do not create a physical obstruction that would damage apparatus.
- H. The installation of devices at any given location shall not automatically approve or qualify installation of similar devices at any other location within the city.

D105.5 Rooftop Access (Addition): All buildings with at least one side elevation of less than seventy (70) feet, as measured from the ground to the top edge of any wall, roof or other building assembly shall have a location designated for aerial apparatus rooftop access.

D105.6 Paved Access (Addition): The property shall feature a location on the paved parking/driving area or accessed from the paved parking/driving area that is designated an "Aerial Ladder Access" location. The designated area shall be able to accommodate an aerial apparatus fifty (50) feet in length, twenty (20) feet in width and capable of supporting a tandem drive axle apparatus with a gross weight of ninety thousand (90,000) pounds. The location shall be such that the aerial turntable of the apparatus is no more than 45 feet from the side of the building. The location may be part of the driveway, loading area or other paved driving surface but shall not be a location where vehicles are allowed to be parked and left unattended for any amount of time.

D105.7 Marking (Addition): The Aerial Apparatus Access location shall be marked with a 12" x 18" sign, with a legend of "Aerial Ladder Access" consisting of white letters and border on a red retro-reflective

background. Additionally, the location of the centerline of the aerial apparatus turntable shall be marked with a painted or epoxy thermoplastic 4" red strip placed horizontally across the payment.

D105.8 Rooftop Ladder Landing (Addition): There shall be an established rooftop ladder landing location on the flat roof of any building where the top edge of the building measures seventy (70) feet or less from the adjacent ground surface to receive the ladder from the aerial apparatus at the designated access area as designated by the Fire Marshal.

D105.8.1 Delineation (Addition): The landing shall be delineated by two permanently affixed red posts, a minimum of eighteen (18) inches tall as measured from the top of outermost edge of the roof to the top of the posts, and wrapped in red retro-reflective sheeting. The posts shall be flexible delineation posts as typically found on highway or aviation taxiway systems and shall give or bend if they come into contact with the aerial ladder. The posts shall be placed 6 feet apart (center to center) on the edge of the building roof or parapet wall and shall be clearly visible from the ground level.

D105.8.2 Landing Platform (Addition): On any building with a parapet wall that extends more than six (6) inches above the plane of the roof, a platform shall be built as a landing area for egress from the aerial ladder. The platform shall be a minimum of six (6) feet wide by six (6) feet long and shall extend between the Delineation posts required in Section D 105.5.9. The platform shall feature a handrail on at least one side that extends forty-two (42) inches above the platform landing and stairs.

D105.8.3 Materials (Addition): The landing shall be made of metal. All standing, walking and landing stairway surfaces shall be made of diamond safety grating punched metal tread plate.

D105.8.4 Stairway Access to Land Platform (Addition): Any elevated landing platform shall be accessed from the rooftop surface by stairs conforming to the 2018 International Building Code.

D105.8.5 Securement (Addition): Any landing and stairway access shall be permanent affixed to the roof by bolted or welded connections.

D105.8.6 Roof Edge Suitable for Aerial Ladder (Addition): The edge of the roof or parapet wall at the identified aerial ladder landing area shall be built or a material that can accommodate the placement of the aerial ladder gently against the building without damaging the building or aerial apparatus.