

ORDINANCE 2017-624

**AN ORDINANCE OF THE CITY OF CEDAR HILL, TEXAS,
REPEALING CHAPTER 6, ARTICLE II, OF THE CODE OF
ORDINANCES OF THE CITY OF CEDAR HILL, TEXAS;
ADOPTING THE 2015 INTERNATIONAL FIRE CODE AS
THE NEW CHAPTER 6, ARTICLE II, OF THE CODE OF
ORDINANCES; AMENDING, ADDING AND DELETING
SECTIONS OF THE 2015 INTERNATIONAL FIRE CODE;
PROVIDING FOR PENALTIES; PROVIDING A SAVINGS
CLAUSE; PROVIDING A SEVERABILITY CLAUSE;
PROVIDING FOR INCORPORATION INTO THE CEDAR
HILL CODE OF ORDINANCES; PROVIDING FOR
IMMEDIATE EFFECT; AND PROVIDING FOR
PUBLICATION.**

WHEREAS, the City Council of the City of Cedar Hill deems it necessary for the purpose of promoting the health, safety and general welfare of the City to enforce fire safety standards and regulations in the City; and

WHEREAS, the City Council finds that the adoption of the 2015 International Fire Code, promotes uniform and minimum standards of fire safety; and

WHEREAS, the City Council finds it necessary to amend, add and delete certain provisions of the 2015 International Fire Code to address regional conditions.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CEDAR HILL, TEXAS:

**SECTION 1. REPEAL OF CHAPTER 6, ARTICLE II, OF THE CODE OF
ORDINANCES OF THE CITY OF CEDAR HILL, TEXAS**

Chapter 6, Article II, of the Code of Ordinances of the City of Cedar Hill, Texas, is hereby repealed in its entirety.

**SECTION 2. ADOPTION OF NEW CHAPTER 6, ARTICLE II, OF THE CODE
OF ORDINANCES OF THE CITY OF CEDAR HILL, TEXAS.**

The following provisions are hereby adopted as Chapter 6, Article II, of the Code of Ordinances of the City of Cedar Hill, Texas:

Sec. 6-21. - Adoption.

The 2015 edition of the International Fire Code is hereby adopted and incorporated in full, save and except such portions as are herein amended, deleted or added by section

6-30, and shall be in force from the effective date of this article and shall be controlling within the areas of jurisdiction of the City of Cedar Hill, Texas.

Sec. 6-22. - Definitions.

- (a) Whenever the word “jurisdiction” is used in the International Fire Code, 2015 edition, it shall be held to mean the corporate limits of the City of Cedar Hill, Texas.
- (b) Whenever the words “corporate counsel” is used in the International Fire Code, 2015 edition, they shall be held to mean the City Attorney for the City of Cedar Hill, Texas.
- (c) Whenever the phrase “Chief of the Bureau of Fire Prevention” or word “Chief” are used in this ordinance and the International Fire Code, 2015 edition, it shall be held to mean the Fire Chief of the City of Cedar Hill, Texas or the Chief’s authorized representative.
- (d) Whenever the phrase “Bureau of Fire Prevention” is used in this ordinance and the International Fire Code, 2015 edition, it shall be held to mean the Fire Department of the City of Cedar Hill, Texas.
- (e) Whenever the word “City” is used in the International Fire Code, 2015 edition, it shall be held to mean the City of Cedar Hill, Texas.
- (f) Whenever the words “Police Chief” are used in the International Fire Code, 2015 edition, they shall be held to mean the Chief of Police of the City of Cedar Hill, Texas.
- (g) Whenever the words “Building Official” are used in the International Fire Code, 2015 edition, they shall be held to mean the Building Official of the City of Cedar Hill, Texas.
- (h) Whenever the words “fleet vehicle” is used in the International Fire Code, 2015 edition, they shall be held to mean a motor vehicle which is one of a group of motor vehicles, owned or operated as a unit and used in the ongoing course of business.

Sec. 6-23. - Establishment and duties of bureau of fire prevention.

- (a) The 2015 edition of the International Fire Code shall be enforced by the Bureau of Fire Prevention in the fire department of the city, which is hereby established and which shall be operated under the supervision of the chief of the fire department.
- (b) The fire marshal in charge of the bureau of fire prevention shall be appointed by the chief of the fire department.

Sec. 6-24. - Establishment of limits of districts in which storage of flammable or combustible liquids outside above-ground tanks is to be prohibited

The limits referred to in Section 5704 of the 2015 edition of the International Fire Code in which storage of flammable or combustible liquids in outside above-ground tanks is prohibited are hereby established as follows: Any area within the city limits unless a permit therefore has been issued by the bureau of fire prevention.

Sec. 6-25. - Establishment of limits in which bulk storage of liquefied petroleum gases is to be restricted

The limits referred to in Section 6109 of the 2015 edition of the International Fire Code in which the bulk storage of liquefied petroleum gas is restricted are hereby established as follows: Any area within the city limits unless a permit there for has been issued by the bureau of fire prevention.

Sec. 6-26. - Establishment of limits of districts in which storage of explosives and blasting agents is to be prohibited.

The limits referred to in Section 5604 of the 2015 edition of the International Fire Code in which storage of explosives and blasting agents is prohibited are hereby established as follows: Any area within the city limits unless a permit there for has been issued by the bureau of fire prevention.

Sec. 6-27. - Appeals.

Whenever the fire marshal shall disapprove an application or refuse to grant a permit applied for, or when it is claimed that the provisions of the code adopted by this article do not apply or that the true intent and meaning of the code have been misconstrued or wrongly interpreted, the applicant may appeal from the decision of the fire marshal to the office of the fire chief within thirty (30) days from the date of the decision appealed.

Sec. 6-28. - New materials, processes or occupancies which may require permits.

The fire chief and the fire marshal shall act as a committee to determine and specify, after giving affected persons an opportunity to be heard, any new materials, processes or occupancies which shall require permits, in addition to those now enumerated in the code adopted by this article. The fire marshal of the division of fire prevention shall post such list in a conspicuous place in his office and distribute copies thereof to interested persons.

Sec. 6-29. - Reserved.

Sec. 6-30. – 2015 International Fire Code amendments, deletions and additions.

Section 102.1 Construction and design provisions. The construction and design provisions of this code shall apply to:

1. Structures, facilities and conditions arising after the adoption of this code.
2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
3. Existing structures, facilities and conditions when required in Chapter 11 or in specific sections of this code.
4. Existing structures, facilities and conditions, which, in the opinion of the fire code official, constitute a distinct hazard to life or property.

(1) Section 105.7.19 is added to read as follows:

Section 105.7.19 Electronic access control systems. Construction permits are required for the installation or modification of an electronic access control system, as specified in Chapter 10. A separate construction permit is required for the installation or modification of a fire alarm system that may be connected to the access control system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

(2) Section 108 Board of Appeals is amended to read as follows

Section 108 Board of Appeals. All appeals any section or appendix of this ordinance and or the adopted International Fire Code of City of Cedar Hill shall be made in writing and presented to the fire chief. The fire chief will render a decision regarding the appeal within 30 days of receiving the written notice of appeal.

(3) Section 109.3.1 is amended to read as follows:

Section 109.3.1 Service. A notice of violation issued pursuant to this code shall be served upon the *owner*, the owner's authorized agent, operator, occupant, or other person responsible for the condition or violation, either by personal service, electronic mail, mail or by delivering the same to, and leaving it with, some person of responsibility upon the premises. For unattended or abandoned locations, a copy of such notice of violation shall be posted on the premises in a conspicuous place at or near the entrance to such premises and the notice of violation shall be mailed by certified mail with return receipt requested or a certificate of mailing, to the last known address of the owner, the owner's authorized agent, or occupant.

(4) Section 202 is amended to read as follows:

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 persons who are rendered incapable of self-preservation by the services provided. This group shall include but not be limited to the following:

- Dialysis center
- Procedures involving Sedation
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

Section 202 Definitions. Atrium. An opening connecting three or more stories other than enclosed stairways, elevators, hoist ways, escalators, plumbing, electrical, air-conditioning or other equipment, which is closed at the top and not defined as a mall. Stories, as used in this definition, do not include balconies within assembly groups or mezzanines that comply with Section 505 of the International Building Code.

Section 202 Definitions. Defend in Place. A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

Section 202 Definitions. Fire Watch. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals or standby personnel when required by the fire code official, for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

Section 202 Definitions. Fireworks. Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, deflagration, detonation, and/or activated by ignition with a match or other heat producing device that meets the definition of 1.4G fireworks or 1.3G fireworks.

Fireworks, 1.4G. Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Such 1.4G fireworks which comply with the construction, chemical composition and labeling regulations of the DOTn for Fireworks, UN 0336, and the U.S. Consumer Product Safety Commission as set forth in CPSC 16 CFR Parts 1500 and 1507, are not explosive materials for the purpose of this code.

Fireworks, 1.3G. Large fireworks devices, which are explosive materials, intended for use in fireworks displays and designed to produce audible or visible effects by combustion, deflagration or detonation. Such 1.3G fireworks include, but are not limited to, firecrackers containing more than 130 milligrams (2 grains) of explosive composition,

aerial shells containing more than 40 grams of pyrotechnic composition and other display pieces which exceed the limits for classification as 1.4G fireworks. Such 1.3G fireworks are also described as Fireworks, UN 0335 by the DOTn.

Section 202 Definitions. High-Piled Combustible Storage. Storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet in height. When required by the fire code official, high-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet in height. Any building classified as a group S Occupancy or Speculative Building exceeding 9,000 sq. ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified, a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum pile height.

Section 202 Definitions. High-Rise Building. A building with an occupied floor located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access.

Section 202 Definitions. 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.

Section 202 Definitions. 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.

Section 202 Definitions. Standby Personnel. Qualified fire service personnel, approved by the Fire Chief. When utilized, the number required shall be as directed by the Fire Chief. Charges for utilization shall be normally calculated by the jurisdiction.

Section 202 Definitions. [Upgraded or Replaced Fire Alarm System. A fire alarm system that is upgraded or replaced includes, but is not limited to the following:

- Replacing a single board or fire alarm control unit component with a newer model
- Installing a new fire alarm control unit in addition to or in place of an existing one
- Conversion from a horn/strobe system to an emergency voice/alarm communication system
- Conversion from a conventional system to one that utilizes addressable or analog devices.

The following are not considered an upgrade or replacement:

- Firmware updates
- Software updates
- Replacing boards of the same model with chips utilizing the same or newer firmware

(5) Section 307.1.1 is amended to read as follows:

Section 307.1.1 Prohibited open burning. Open burning that is offensive or objectionable because of smoke emissions, or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

Exception: Prescribed burning for the purpose of reducing the impact of wildland fire when authorized by the fire code official.

(6) Section 307.2 is amended to read as follows:

Section 307.2 Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, or open burning. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

Examples of state or local law, or regulations referenced elsewhere in this section may include but not be limited to the following:

1. Texas Commission on Environmental Quality guidelines and/or restrictions.
2. State, County or local temporary or permanent bans on open burning.
3. Local written policies as established by the fire code official.

(7) Section 307.3 is amended to read as follows:

Section 307.3 Extinguishment authority. The fire code official is authorized to order the extinguishment by the permit holder, another person responsible or the fire department of open burning that creates or adds to a hazardous or objectionable situation.

(8) Section 307.4 is amended to read as follows:

Section 307.4 Location. The location for specially permitted open burning shall not be less than 300 feet (91,440 mm) from any structure, and provisions shall be made to prevent the fire from spreading to within 300 feet (91,440 mm) of any structure.

Exceptions:

1. Fires in approved containers that are not less than 15 feet (4572 mm) from a structure.
2. The minimum required distance from a structure shall be 25 feet (7620 mm) where the pile size is 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height.

(9) Section 307.4.3 is amended to read as follows:

Section 307.4.3 Portable outdoor fireplaces. Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within 15 feet (4572 mm) of a structure or combustible material.

Exceptions:

1. Portable outdoor fire places used at one- and two-family dwellings.
2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system.

(10) Section 307.4.4 is added to read as follows:

Section 307.4.4 Permanent outdoor fire pit. Permanently installed outdoor fire pits for recreational fire purposes shall not be installed within 10 feet of a structure or combustible material.

Exception: Permanently installed outdoor fireplaces constructed in accordance with the International Building Code.

(11) Section 307.4.5 is added to read as follows:

Section 307.4.5 Trench Burns. Trench burns when approved and permitted by the fire code official shall be conducted in air curtain trenches and in accordance with Section 307.2.

(12) Section 307.5 is amended to read as follows:

Section 307.5 Attendance. Open burning, trench burns, and use of portable outdoor fire places shall be constantly attended until the fire is extinguished. A minimum of one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate utilization.

(13) Section 308.1.4 is amended to read as follows:

Section 308.1.4 Open-flame cooking devices. Open-flame cooking devices, charcoal grills, and other similar devices used for cooking, shall not be located or used on combustible balconies, decks, or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family dwelling, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg)]

- LP-gas capacity] with an aggregate LP-gas capacity not to exceed 100 lbs. (5 containers).
2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity], with an aggregate LP-gas capacity not to exceed 40 lbs. (2 containers).
 3. {LP-gas cooking devices having LP-gas container with a water capacity not greater than 21/2 pounds nominal 1 pound (0.454 kg) LP-gas capacity.

(14) Section 308.1.6.2 is amended to read as follows:

Section 308.1.6.2 Portable fueled open-flame devices. Portable open-flame devices fueled by flammable or combustible gases or liquids shall be enclosed or installed in such a manner as to prevent the flame from contacting combustible material.

Exceptions:

1. LP-gas-fueled devices used for seating pipe joints or removing paint in accordance with Chapter 61.
2. Cutting and welding operations in accordance with Chapter 35.
3. Torches or flame-producing devices in accordance with Section 308.1.3.
4. Candles and open-flame decorative devices in accordance with Section 308.3.

(15) Section 308.1.6.3 is amended to read as follows:

Section 308.1.6.3 Sky Lanterns. A person shall not release or cause to be released an-unmanned free-floating devices containing an open flame or other heat source, such as but not limited to a sky lantern.

(16) Section 311.5 is amended to read as follows:

Section 311.5 Placards. The fire code official is authorized to require marking of any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards, as required by Section 311.5.1 through 311.5.5.

(17) Section 403.5 is amended to read as follows:

Section 403.5 Group E occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. A diagram depicting two evacuation routes shall be posted in a conspicuous location in each classroom. Group E occupancies shall also comply with sections 403.5.1 through 403.5.3.

(18) Section 404.2.2 is amended to read as follows:

404.2.2 Fire safety plans. Fire safety plans shall include the

following:

1. The procedure for reporting a fire or other emergency.
2. The life safety strategy including the following:
 - 2.1. Procedures for notifying occupants, including areas with a private mode alarm system.
 - 2.2. Procedures for occupants under a defend-inplace response.
 - 2.3. Procedures for evacuating occupants, including those who need evacuation assistance.
3. Site plans indicating the following:
 - 3.1. The occupancy assembly point.
 - 3.2. The locations of fire hydrants.
 - 3.3. The normal routes of fire department vehicle access.
4. Floor plans identifying the locations of the following:
 - 4.1. Exits.
 - 4.2. Primary evacuation routes.
 - 4.3. Secondary evacuation routes.
 - 4.4. Accessible egress routes.
 - 4.4.1. Areas of refuge.
 - 4.4.2. Exterior areas for assisted rescue.
 - 4.5. Refuge areas associated with smoke barriers and horizontal exits.
 - 4.6. Manual fire alarm boxes.
 - 4.7. Portable fire extinguishers.
 - 4.8. Occupant-use hose stations.
 - 4.9. Fire alarm annunciators and controls.
 - 4.10 Fire extinguishing system controls
5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.
7. Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.

(19) Section 405.4 is amended to read as follows:

Section 405.4 Time. The fire code official may require an evacuation drill at any time. Drills shall be held at unexpected times and under varying conditions to simulate the unusual conditions that occur in case of fire.

(20) Section 501.4 is amended to read as follows:

Section 501.4 Timing of installation. When fire apparatus access roads or a water supply for fire protection is required to be installed for any structure or development, they shall be installed, tested, and approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

(21) Section 503.1.1 is amended to read as follows:

Section 503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45,720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. Except for one-or two-family dwellings, the path of measurement shall be along a minimum of a ten feet (10') wide unobstructed pathway around the external walls of the structure.

(22) Section 503.2.1 is amended to read as follows:

Section 503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 24 feet (7315 mm), exclusive of shoulders, and an unobstructed vertical clearance of not less than 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.

(23) Section 503.2.2 is amended to read as follows:

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

(24) Section 503.2.3 is amended to read as follows:

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

(25) Section 503.3 is amended to read as follows:

Section 503.3 Marking. 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. 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 "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 15 feet intervals on the red border markings along both sides of the fire lanes. A 12-inch spacing

is required between “FIRE LANE” and “NO PARKING”. Where a curb is available, the stripping 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 code official.

(26) Section 503.4 is amended to read as follows:

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 any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

(27) Section 505.1 is amended to read as follows:

505.1 Address Identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 12 inches high (304.8 mm) With a minimum stroke width of 1/2 inch (12.7 mm) Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road, buildings do not immediately front a street, and/or with approved 12 inch (304.8 mm) height building numerals or addresses and 4 inch (101.6 mm) height suite/apartment numerals of a color contrasting with the background of the building or other approved Numerals or addresses shall be posted on a minimum 20 inch (508 mm) by 30 inch (762 mm) background on border. shall be maintained. High with a minimum stroke width of 1/2 the building cannot be viewed from the public way, a monument, pole or other sign means shall be used to identify the structure. Address identification shall be maintained.

Exception: R-3 Single Family occupancies shall have approved numerals of a minimum 3 1/2 inches (88.9 mm) in height and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

(28) Section 507.4 is amended to read as follows:

507.4 Water Supply Test Date and Information. The water supply test used for hydraulic calculation of fire protection systems shall be conducted in accordance with

NFPA 291 “Recommended Practice for Fire Flow Testing and Marking of Hydrants” and within one year of sprinkler plan submittal. The fire code official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the fire code official, as required. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings. All fire protection plan submittals shall be accompanied by a hard copy of the waterflow test report, or as approved by the fire code official. The report must indicate the dominant water tank level at the time of the test and the maximum and minimum operating levels of the tank, as well, or identify applicable water supply fluctuation. The licensed contractor must then design the fire protection system based on this fluctuation information, as per the applicable referenced NFPA standard. Reference Section 903.3.5 for additional design requirements.

(29) Section 507.5.1 is added to read as follows:

Section 507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 300 feet (91 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

(30) Section 507.5.1 is amended to read as follows:

Section 507.5.1.1 Hydrant for sprinkler and standpipe systems. Buildings equipped with an automatic fire sprinkler or standpipe system shall have a fire hydrant within 100 feet (30 480 mm) of the fire department connection.

Exception: The distance shall be permitted to exceed 100 feet (30 480 mm) where *approved by the fire code official*.

(31) Section 507.5.4 is amended to read as follows:

Section 507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

(32) Section 509.1.2 is amended to read as follows:

Section 509.1.2 Sign Requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of two (2) inches (50.8 mm) when located inside a building and four (4) inches (101.6 mm) when located outside, or as approved by the fire code official. The letters shall be of a color that contrasts with the background.

(33) Section 603.3.2.1 is amended to read as follows:

Section 603.3.2.1 Quantity limits. One or more fuel oil storage tanks containing Class II or III combustible liquid shall be permitted in a building. The aggregate capacity of all such tanks shall not exceed 660 gallons (2498 L).

Exception: The aggregate capacity limit shall be permitted to be increased to 3,000 gallons (11,356 L) in accordance with all requirements of Chapter 57.

(34) Section 603.3.2.2 is amended to read as follows:

Section 603.3.2.2 Restricted use and connection. Tanks installed in accordance with Section 603.3.2 shall be used only to supply fuel oil to fuel-burning equipment installed in accordance with Section 603.3.2.4. Connections between tanks and equipment supplied by such tanks shall be made using closed piping systems.

(35)Section 604.1.1 is amended to read as follows:

604.1.1 Stationary Generators. Stationary emergency and standby power generators required by this code shall be listed in accordance with UL 2200.

(36) Section 604.1.2 is amended to read as follows:

Section 604.1.2 Installation. Emergency power systems and standby power systems shall be installed in accordance with the *International Building Code*, NFPA 70, NFPA 110 and NFPA 111. Existing installations shall be maintained in accordance with the original approval, except as specified in Chapter 11.

(37) Section 604.1.9 is amended to read as follows:

Section 604.1.9 Critical Operations Power Systems (COPS). For Critical Operations Power Systems necessary to maintain continuous power supply to facilities or parts of facilities that require continuous operation for the reasons of public safety, emergency management, national security, or business continuity, see NFPA 70.

(38) Section 604.2 is amended to read as follows:

Section 604.2 Where Required. Emergency and standby power systems shall be provided where required by Sections 604.2.1 through 604.2.24 or elsewhere identified in this code or any other referenced code.

(39) Section 604.2.4 is amended to read as follows:

Section 604.2.4 Emergency Voice/alarm Communications Systems. Emergency power shall be provided for emergency voice/alarm communications systems in the following occupancies, or as specified elsewhere in this code, as required in Section 907.5.2.2.5. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

- a) Covered and Open Malls, Section 907.2.20 and 914.2.3
- b) Group A Occupancies, Sections 907.2.1 and 907.5.2.2.4.
- c) Special Amusement Buildings, Section 907.2.12.3
- d) High-rise Buildings, Section 907.2.13
- e) Atriums, Section 907.2.14
- f) Deep Underground Buildings, Section 907.2.19

(40) Section 604.2.12 is amended to read as follows:

Section 604.2.12 Means of Egress Illumination. Emergency power shall be provided for *means of egress* illumination in accordance with Sections 1008.3 and 1104.5.1. (90 minutes)

(41) Section 604.2.13 is amended to read as follows:

Section 604.2.13 Membrane Structures. Emergency power shall be provided for *exit* signs in temporary tents and membrane structures in accordance with Section 3103.12.6.1. (90 minutes) Standby power shall be provided for auxiliary inflation systems in permanent membrane structures in accordance with Section 2702 of the *International Building Code*. (4 hours) Auxiliary inflation systems shall be provided in temporary air-supported and air-inflated membrane structures in accordance with section 3103.10.4.

(42) Section 604.2.15 is amended to read as follows:

Section 604.2.15 Smoke Control Systems. Standby power shall be provided for smoke control systems in the following occupancies, or as specified elsewhere in this code, as required in Section 909.11:

- a) Covered Mall Building, *International Building Code*, Section 402.7
- b) Atriums, *International Building Code*, Section 404.7
- c) Underground Buildings, *International Building Code*, Section 405.8
- d) Group I-3, *International Building Code*, Section 408.4.2
- e) Stages, *International Building Code*, Section 410.3.7.2
- f) Special Amusement Buildings (as applicable to Group A's), *International Building Code*, Section 411.1
- g) Smoke Protected Seating, Section 1029.6.2.1

(43) Section 604.2.17 is amended to read as follows:

Section 604.2.17 Covered and Open Mall Buildings. Emergency power shall be provided in accordance with Section 907.2.20 and 914.2.3.

(44) Section 604.2.19 is amended to read as follows:

Section 604.2.19 Smoke proof Enclosures and Stair Pressurization Alternative. Standby power shall be provided for smoke proof enclosures, stair pressurization alternative and associated automatic fire detection systems as required by the *International Building Code*, Section 909.20.6.2.

(45) Section 604.2.20 is amended to read as follows:

Section 604.2.20 Elevator Pressurization. Standby power shall be provided for elevator pressurization system as required by the *International Building Code*, Section 909.21.5.

(46) Section 604.2.21 is amended to read as follows:

Section 604.2.21 Elimination of Smoke Dampers in Shaft Penetrations. Standby power shall be provided when eliminating the smoke dampers in ducts penetrating shafts in accordance with the *International Building Code*, Section 717.5.3, exception 2.3.

(47) Section 604.2.22 is amended to read as follows:

Section 604.2.22 Common Exhaust Systems for Clothes Dryers. Standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures in accordance with the *International Mechanical Code*, Section 504.10, Item 7.

(48) Section 604.2.23 is amended to read as follows:

Section 604.2.23 Hydrogen Cutoff Rooms. Standby power shall be provided for mechanical ventilation and gas detection systems of Hydrogen Cutoff Rooms in accordance with the *International Building Code*, Section 421.8.

(49) Section 604.2.24 is amended to read as follows:

Section 604.2.24 Means of Egress Illumination in Existing Buildings. Emergency power shall be provided for *means of egress* illumination in accordance with Section 1104.5 when required by the fire code official. (90 minutes in I-2, 60 minutes elsewhere.)

(50) Section 604.8 is amended to read as follows:

Section 604.8 Energy Time Duration. Unless a time limit is specified by the fire code official, in this chapter or elsewhere in this code, or in any other referenced code or standard, the emergency and standby power system shall be supplied with enough fuel or energy storage capacity for not less than 2-hour full-demand operation of the system.

Exception: Where the system is supplied with natural gas from a utility provider and is approved.

(51) Section 609.2 is amended to read as follows:

Section 609.2 Where Required. A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors, including but not limited to cooking equipment used in fixed, mobile, or temporary concessions, such as trucks, buses, trailers, pavilions, or any form of roofed enclosure, as required by the fire code official.

Exceptions:

- 1) Tents, as provided for in Chapter 31.
- 2) 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/m³ or less of grease when tested at an exhaust flow rate of 500 cfm (0.236 m³/s) in accordance with UL 710B.

Additionally, fuel gas and power provided for such cooking appliances shall be interlocked with the extinguishing system, as required by Section 904.12.2. Fuel gas containers and piping/hose shall be properly maintained in good working order and in accordance with all applicable regulations.

(52) Section 704.1 is amended to read as follows:

Section 704.1 Enclosure. Interior vertical shafts including, but not limited to, *stairways*, elevator hoist ways, service and utility shafts, that connect two or more stories of a building shall be enclosed or protected in accordance with the codes in effect at the time of construction but, regardless of when constructed, not less than as required in Chapter 11. New floor openings in existing buildings shall comply with the *International Building Code*.

(53) Section 807.3 is amended to read as follows:

Section 807.3 Combustible Decorative Materials. In occupancies in Groups A, E, I, and R-1, and dormitories in Group R-2, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall comply with Section 807.4 and shall not exceed 10 percent of the specific wall or ceiling area to which they are attached.

(54) Section 807.5.2.2 is amended to read as follows:

Section 807.5.2.2 Artwork in Corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

(55) Section 807.5.2.3 is amended to read as follows:

Section 807.5.2.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

(56) Section 807.5.5.2 is amended to read as follows:

Section 807.5.5.2 Artwork in Corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

(57) Section 807.5.5.3 is amended to read as follows:

Section 807.5.5.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

(58) 901.6.1.1 is added to read as follows:

901.6.1.1 Standpipe Testing. Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be back flushed when foreign material is present and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.
2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the fire code official) to each FDC,

and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.

3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.
4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the fire code official.
5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.
6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (fire code official) shall be followed.
7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.
8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.
9. Contact the fire code official for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the fire code official.

(59) Section 901.6.3 is amended by amended to read as follows:

901.6.3 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

(60) Section 901.6.4 is added to read as follows:

Section 901.6.4 Systems in high-rise buildings. The owner of a high-rise building shall be responsible for assuring that the fire and life-safety systems required by the Building

Code are maintained in an operable condition at all times. Unless otherwise required by the chief, quarterly tests of such systems shall be conducted by approved persons. A written record shall be maintained and shall be made available to the inspection authority.

(61) Section 901.6.5 is added to read as follows:

901.6.5 Smoke-control systems. Mechanical smoke-control systems, such as those in high-rise buildings, buildings containing atria, covered mall buildings and mechanical ventilation systems utilized in smoke proof enclosures and for smoke-removal systems utilized in high-piled combustible storage occupancies, shall be maintained in an operable condition at all times. Unless otherwise required by the chief, quarterly tests of such systems shall be conducted by approved persons. A written record shall be maintained and shall be made available to the inspection authority.

(62) Section 901.7 is amended to read as follows:

901.7 Systems Out of Service. Where a required fire protection system is out of service or in the event of an excessive number of activations, the fire department and the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service. Where utilized, fire watches shall be provided with not less than one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

(63) Section 901.8.2 is amended to read as follows:

901.8.2 Removal of Occupant-use Hose Lines. The fire code official is authorized to permit the removal of existing occupant-use hose lines and hose valves where all of the following conditions exist:

1. The hose line(s) would not be utilized by trained personnel or the fire department.
2. If the occupant-use hose lines are removed, but the hose valves are required to remain as per the fire code official, such shall be compatible with local fire department fittings.
3. If the occupant-use hose lines are removed, but the hose valves are required to remain as per the fire code official, such shall be compatible with local fire department fittings.

(64) Section 903.1.1 is amended by amended to read as follows:

Section 903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in addition to automatic sprinkler protection where recognized by the applicable standard or as approved by the fire code official.

(65) Section 903.2 is amended by amended to read as follows:

Section 903.2 Where required. Approved automatic sprinkler systems in new or remodeled buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12.

Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoist ways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating “ELEVATOR MACHINERY – NO STORAGE ALLOWED.”

In addition to other sections of the 2015 International Fire Code, an approved automatic fire sprinkler system shall be installed in the occupancies and locations, excluding detached Group U (private garages, carports and sheds), as follows:

(66) Section 903.2.1.1 is amended by amended to read as follows:

903.2.1.1 Group A-1. An automatic sprinkler system shall be provided for Group A-1 Occupancies where one of the following conditions exists:

1. The fire area exceeds 9,000 square feet (836 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.
4. The fire area contains a multi-theater complex.

(67) Section 903.2.1.3 is amended by amended to read as follows:

903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 Occupancies where one of the following conditions exists:

1. The fire area exceeds 9000 square feet (836 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.

Exception: Areas used exclusively as participant sports areas where the main floor area is located at the same level as the level of exit discharge of the main entrance and exit.

(68) Section 903.2.1.4 is amended by amended to read as follows:

903.2.1.4 Group A-4. An automatic sprinkler system shall be provided for Group A-4 Occupancies where one of the following conditions exists:

1. The fire area exceeds 9,000 square feet (836 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.

(69) Section 903.2.4 is amended to read as follows:

903.2.4 Group F-1. An automatic sprinkler system shall be provided for Group F-1 where the following conditions exist:

1. F-1 moderate hazard occupancies 9,000 square feet and greater containing the following:

Air craft (Manufacturing, not to include repair)
Beverages; over 16 percent alcohol content.
Boats
Canvas or similar fabric.
Clothing
Electric generation plants
Engines (including rebuilding)
Food processing and commercial kitchens not associated with restaurants, cafeterias and similar dining facilities are more than 2,500 square feet (232m²) in area.
Furniture (Sprinkle at 2,500 square feet)
Metals
Millwork
Paper Mills or products
Plastic products
Refuse Incineration
Photo engravings
Resilient flooring
Silks
Tobacco, cigars, cigarettes and snuff
Upholstery and mattresses
Wax candles

An automatic sprinkler system shall be provided throughout all other Group F-1 occupancies not listed here at 12,000 square feet or greater.

2. A Group F-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group F fire areas on all floors, including any mezzanines, exceeds 18,000 square feet (1672 m²)
4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).

(70) Section 903.2.7 is amended to read as follows:

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

1. A Group M fire area exceeds 9,000 square feet (836 m²).
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 m²).
4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m²).
5. An automatic sprinkler system shall be provided throughout buildings containing Group M occupancy when the storage fire area exceeds 2,500 square feet.

(71) Section 903.2.9 is amended to read as follows:

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

1. S-1 moderate hazard occupancies 9,000 square feet and greater containing the following:

Aerosols, Levels 2 and 3
Aircraft hangar (storage and repair)
Bags: cloth, burlap and paper
Bamboos and rattan
Baskets
Belting: canvas and leather
Books and paper in rolls or packs
Boots and shoes
Buttons, including cloth covered, pearl or bone
Cardboard and cardboard boxes
Clothing, woolen wearing apparel
Cordage

Dry boat storage (indoor)
Furniture
Furs
Glues, mucilage, pastes and size
Grains
Horns and combs, other than celluloid
Leather
Linoleum
Lumber
Tobacco, cigars, cigarettes and snuff
Wax candles

An automatic sprinkler system shall be provided throughout all other Group S-1 moderate hazard occupancies not listed here at 12,000 square feet or greater.

2. A Group S-1 fire area is located more than three stories above grade plane.
3. The combined area of all S-1 fire areas on all floors, including any mezzanines, exceeds 18,000 square feet (1672 m²).
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 m²).
5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).

(72) Section 903.2.9.1 is amended to read as follows:

903.2.9.1 Repair Garages An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with amended Section 406.8 in the Building Code as shown:

1. Buildings having two or more stories above grade plane, including basements, with a fire area containing a repair garage exceeding 10,000 square feet (929 m²).
2. Buildings not more than one story above grade plane, with a fire area containing a repair garage exceeding 10,000 square feet (1115 m²).
3. Buildings with repair garages servicing vehicles parked in basements.
4. A Group S-1 fire area used for the repair of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 m²).

(73) Section 903.2.9.3 is added to read as follows:

903.2.9.3 Self Service Storage facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

(74) Section 903.2.10 is amended to read as follows:

903.2.10 All Group S-2 Enclosed parking garages. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.6 of the International Building Code where either of the following conditions exists:

1. Where the fire area of the enclosed parking garage exceeds 12,000 square feet (1115 m²).
2. Where the enclosed parking garage is located beneath other groups.

Exception: Enclosed parking garages located beneath Group R-3 occupancies.

(75) Section 903.2.11.3 is amended to read as follows:

903.2.11.3 Buildings 55 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories, other than penthouses in compliance with Section 1510 of the International Building Code, located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exceptions: Open parking structures in compliance with Section 406.5 of the International Building Code, having no other occupancies above the subject garage.

Section 903.2.11.7 is amended to read as follows:

(76) 903.2.11.7 High-Piled Combustible Storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 to determine if those provisions apply.

(77) Section 903.2.11.8 is added to read as follows:

903.2.11.8 Spray Booths and Rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

(78) Section 903.3.1.1.1 is amended to read as follows:

903.3.1.1.1 Exempt locations. When approved by the fire code official, automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion and/or rate of rise heat detectors. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard as determined by the building official or fire code official.

2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the building official and fire code official.
3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. Elevator machine rooms, machinery spaces, and hoist ways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

(79) Section 903.3.1.2.3 is added to read as follows:

Section 903.3.1.2.3 Attics, Open Breezeways, and Attached Garages. Sprinkler protection is required in attic spaces of such buildings two or more stories in height, open breezeways, and attached garages in accordance with NFPA 13 and or NFPA 13R requirements.

(80) Section 903.3.1.3 is amended to read as follows:

Section 903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one- and two-family dwellings, Group R-3 and R-4 Condition 1 and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law.

(81) Section 903.3.1.4 is added to read as follows:

Section 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.

(82) Section 903.3.1.4.1 is added to read as follows:

Section 903.3.1.4.1 Attics. Only dry-pipe, pre-action, 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.

(83) Section 903.3.1.4.2 is added to read as follows:

Section 903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official.

(84) Section 903.3.5 is amended to read as follows:

Section 903.3.5 Water supplies. Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the International Plumbing Code. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official.

Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10 psi safety factor. Reference Section 507.4 for additional design requirements.

(85) Section 903.4 is amended to read as follows:

Section 903.4 Sprinkler system monitoring and alarms. Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures, and water-flow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

1. Automatic sprinkler systems protecting one- and two-family dwellings.
2. Limited area sprinkler systems in accordance with Section 903.3.8.
3. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.
4. Jockey pump control valves that are sealed or locked in the open position.
5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position.

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe

systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

(86) Section 903.4.2 is amended to read as follows:

Section 903.4.2 Alarms. An approved audible device, located on the exterior of the building in an approved location, shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

(87) Section 905.2 is amended to read as follows:

Section 905.2 Installation standards. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual Dry Standpipes shall be supervised with a minimum of 10 psig and a maximum 40-psig-air pressure with a high/low alarm.

(88) Section 905.3.9 is added to read as follows:

Section 905.3.9 Buildings Exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200 feet (600960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

1. Automatic dry and semi-automatic dry, or manual dry standpipes are allowed as provided for in NFPA 14.
2. R-2 occupancies of four stories or less in height having no interior corridors.

(89) Section 905.4 is amended to read as follows:

Section 905.4 Location of Class I standpipe hose connections.

Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.
2. On each side of the wall adjacent to the exit opening of a horizontal exit.

Exception: Where floor areas adjacent to a horizontal exit are reachable from an interior exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30480 mm) of hose, a hose connection shall not be required at the horizontal exit.

3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where floor areas adjacent to an exit passageway are reachable from an exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.

4. In covered mall buildings, adjacent to each exterior public entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.
5. Where the roof has a slope less than four unit's vertical in 12 unit's horizontal (33.3-percent slope), each standpipe shall be provided with a two-way hose connection located to serve the roof or at the highest landing of an exit stairway with stair access to the roof provided in accordance with Section 1011.12.
6. Where the most remote portion of a nonsprinklered floor or story is more than 150 feet (45720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet (60960 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in approved locations.
7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

(90) Section 905.9 is amended to read as follows:

Section 905.9 Valve supervision. Valves controlling water supplies shall be supervised in the open position so that a change in the normal position of the valve will generate a supervisory signal at the supervising station required by Section 903.4. Where a fire alarm system is provided, a signal shall also be transmitted to the control unit.

Exceptions:

1. Valves to underground key or hub valves in roadway boxes provided by the municipality or public utility do not require supervision.
2. Valves locked in the normal position and inspected as provided in this code in buildings not equipped with a fire alarm system.

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

(91) Section 907.1.4 is added to read as follows:

Section 907.1.4 Design Standards. Where a new fire alarm system is installed, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke detectors shall have analog initiating devices.

(92) Section 907.2.1 is amended to read as follows:

Section 907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies having an occupant load of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the International Building Code shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Activation of fire alarm notification appliances shall:

1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11lux) at the walking surface level, and
2. Stop any conflicting or confusing sounds and visual distractions.

(93) Section 907.2.13 is amended to read as follows:

907.2.13 High-rise buildings. High-rise buildings shall be provided with an automatic smoke detection system in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 of this code and Section 412 of the International Building Code.
2. Open parking garages in accordance with Section 406.5 of the International Building Code.
3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the International Building Code; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants, and similarly enclosed areas.

4. Low-hazard special occupancies in accordance with Section 503.1.1 of the International Building Code.
5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415 of the International Building Code.
6. In Group I-1 and I-2 occupancies, the alarm shall sound at a constantly attended location and occupant notification shall be broadcast by the emergency voice/alarm communication system.

(94) Section 907.2.3 is amended to read as follows:

Section 907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarms system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. A manual fire alarm system is not required in Group E occupancies with an occupant load of 50 or less when provided with an approved automatic sprinkler system.
 - 1.1 Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.)
2. Emergency voice/alarm communication systems meeting the requirements of section 907.5.2.2 and installed in accordance with section 907.6 shall not be required in group E occupancies with occupant loads of 100 or less, provided that activation of the manual fire alarm system initiates an *approved* occupant notification signal in accordance with Section 907.5.
3. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:
 - 3.1. Interior corridors are protected by smoke detectors.
4. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:
 - 4.1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.
 - 4.2. The emergency voice/alarm communication system will activate on sprinkler water flow.
 - 4.3. Manual activation is provided from a normally occupied location.

(95) Section 907.2.11.2 is amended to read as follows:

Section 907.2.11.2 Groups R-2, R-3 R-4 and I-1. Single or multiple-station smoke alarms shall be installed and maintained in Groups R-2, R-3, R-4 and I-1 regardless of occupant load at all of the following locations:

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

All smoke alarms shall be UL listed and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72.

(96) Section 907.2.13 is amended to read as follows:

Section 907.2.13 High-rise buildings. High-rise buildings shall be provided with an automatic smoke detection system in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412 of the International Building Code.
2. Open parking garages in accordance with Section 406.5 of the International Building Code.
3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the International Building Code; however, this exception does not apply to accessory uses including but not limited to skyboxes, restaurants and similarly enclosed areas.
4. Low-hazard special occupancies in accordance with Section 503.1.1 of the International Building Code.
5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415 of the International Building Code.

6. In Group I-1 and I-2 occupancies, the alarm shall sound at a constantly attended location and occupant notification shall be broadcast by the emergency voice/alarm communication system.

(97) Section 907.2.13.1.1 amended to read as follows:

Section 907.2.13.1.1 Area smoke detection. Area smoke detectors shall be provided in accordance with this section. Smoke detectors shall be connected to an automatic fire alarm system. The activation of any detector required by this section shall activate the emergency voice/alarm communication system in accordance with Section 907.5.2.2. In addition to smoke detectors required by Sections 907.2.1 through 907.2.10, smoke detectors shall be located as follows:

1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room, and Central Control Station.
2. In each elevator machine room, machinery space, control room and control space and in elevator lobbies.
3. For Group R, Division 1 Occupancies, in all interior corridors serving as a means of egress for an occupant load of 10 or more.

(98) Section 907.4.2.7 is added to read as follows:

Section 907.4.2.7 Type. Manual alarm actuating devices shall be an approved double action type.

(99) Section 907.6.1.1 is added to read as follows:

Section 907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from an addressable input (monitor) module may be wired Class B, provided the distance from the addressable module to the initiating device is ten feet or less.

(100) Section 907.6.3 is amended as follows:

907.6.3 Initiating device identification. The fire alarm system shall identify the specific initiating device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate.

(101) Section 907.6.6 is amended to read as follows

Section 907.6.6 Monitoring; – Fire alarm systems required by this chapter or by the International Building Code shall be monitored by an approved supervising station in accordance with NFPA 72.

Exception: Monitoring by a supervising station is not required for:

1. Single- and multiple-station smoke alarms required by Section 907.2.11.
2. Smoke detectors in Group I-3 occupancies.
3. Automatic sprinkler systems in one- and two-family dwellings.

See 907.6.3 for the required information transmitted to the supervising station.

(102) Section 907.6.6.3 is added to read as follows

Section: 907.6.6.3 Communication requirements. All alarm systems, new or replacement, shall transmit alarm, supervisory and trouble signals descriptively to the approved central station, remote supervisory station or proprietary supervising station as defined in NFPA 72, with the correct device designation and location of addressable device identification. Alarms shall not be permitted to be transmitted as a general alarm or zone condition.

(103) Section 909.2.1 is added to read as follows:

Section 909.2.1 Smoke-control system for high-rises. A smoke control system meeting the requirements of Section 909 in the International Fire Code- 2015 edition and International Building Code – 2015 edition shall be provided for high-rise buildings.

(104) Section 909.22 is added to read as follows:

Section 909.22 Stairway or Ramp Pressurization Alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smoke proof enclosure, interior exit stairways or ramps shall be pressurized to a minimum of 0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the fire department as per Section 105.7.

(105) Section 909.22.1 is added to read as follows:

Section 909.22.1 Ventilating equipment. The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor

level at an approved location at the entrance to the smoke proof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, the mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

(106) Section 909.22.1.1 is added to read as follows:

Section 909.22.1.1 Ventilation Systems. Smoke proof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smoke proof enclosure or connected to the smoke proof enclosure by ductwork enclosed by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
2. Equipment, control wiring, power wiring and ductwork shall be located within the smoke proof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by not less than 2-hour barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

Exceptions:

1. Control wiring and power wiring utilizing a 2-hour rated cable or cable system.
2. Where encased with not less than 2 inches (51 mm) of concrete.
3. Control wiring and power wiring protected by a listed electrical circuit protective systems with a fire-resistance rating of not less than 2 hours.

(107) Section 909.22.1.2 is added to read as follows:

Section 909.22.1.2 Standby Power. Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.

(108) Section 909.22.1.3 is added to read as follows:

Section 909.22.1.3 Acceptance and Testing. Before the mechanical equipment is approved, the system shall be tested in the presence of the fire code official to confirm that the system is operating in compliance with these requirements.

(109) Section 910.2 is amended to read as follows:

Section 910.2 Where Required. Smoke and heat vents or a mechanical smoke removal system shall be installed as required by Sections 910.2.1 and 910.2.2

Exceptions:

1. Frozen food warehouses used solely for storage of Class I and II commodities where protected by an approved automatic sprinkler system.
2. Only manual smoke and heat removal shall not be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.
3. Only manual smoke and heat removal shall be required in areas of buildings equipped with control mode special application sprinklers with a response time index of $50(m \cdot S)^{1/2}$ or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

(110) Section 910.2.3 is added to read as follows:

910.2.3 Group H. Buildings and portions thereof used as Group H occupancy as Section follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet in single floor area.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2,3,and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

(111) Section 910.3.4 is added to read as follows:

Section 910.3.4 Vent Operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

(112) Section 910.3.4.1 is added to read as follows:

Section 910.3.4.1 Sprinkled buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically. The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only systems per Section 910.2.

(113) Section 910.3.4.2 is added to read as follows:

Section 910.3.4.2 Non sprinkled Buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.

Exception: Listed gravity-operated drop out vents.

(114) Section 910.3.4.3 is added to read as follows:

Section 910.3.4.3 Gravity-operated drop out vents. Automatic smoke and heat vents containing heat sensitive glazing designed to shrink and drop out of the vent opening when exposed to fire shall fully open within 5 minutes after the vent cavity is exposed to a simulated fire represented by a time-temperature gradient that reaches an air temperature of 500 degrees F (260 degrees C) within 5 minutes

(115) Section 910.4.3.1 is amended to read as follows

Section 910.4.3.1 Makeup Air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m² per 0.4719 m³/s) of smoke exhaust.

(116) Section 910.4.4 is amended to read as follows:

Section 910.4.4 Activation. The mechanical smoke removal system shall be activated automatically by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided.

Exception: Manual only systems per Section 910.2.

(117) Section 912.2.3 is added to read as follows:

Section 912.2.3 Hydrant distance. An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.

(118) Section 913.2.1 is amended to read as follows:

Section 913.2.1 Protection of fire pump rooms. Rooms where fire pumps are located shall be separated from all other areas of the building in accordance with Section 913.2.1 of the International Building Code.

When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the *fire code official*. Access keys shall be provided in the key box as required by Section 506.1.

(119) Section 914.3.1.2 is amended to read as follows:

Section 914.3.1.2 Water Supply to required Fire Pumps. In buildings that are more than 120 feet (128 m) in *building height*, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: Two connections to the same main shall be permitted provided the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through no fewer than one of the connections.

(120) Section 1006.2.2.6 is amended to read as follows:

Section 1006.2.2.6 Electrical Rooms. For electrical rooms, special exiting requirements may apply. Reference the Electrical Code as adopted.

(121) Section 1009.1 is amended to read as follows:

Section 1009.1 Accessible means of egress required. Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress is required by Section 1006.2 or 1006.3 from any accessible space, each accessible portion of the space shall be served by not less than two accessible means of egress.

Exceptions:

1. Accessible means of egress are not required in alternations to existing buildings.
2. One accessible means of egress is required from an accessible mezzanine level in accordance with Section 1009.3, 1009.4, or 1009.5.
3. In assembly areas with sloped or stepped aisles, one accessible means of egress is permitted where the common path of travel is accessible and meets the requirements in Section 1029.8.
4. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009.

(122) Section 1010.1.9.4 is amended to read as follows:

Section: 1010.1.9.4 Bolt locks. Manually operated flush bolts or surface bolts are not permitted.

Exceptions:

1. On doors not required for egress in individual dwelling units or sleeping units.
2. Where a pair of doors serves a storage or equipment room, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf.
3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, M, or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf. The inactive leaf shall contain no doorknobs, panic bars or similar operating hardware.
4. Where a pair of doors serves a Group A, B, F, M or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf provided such inactive leaf is not needed to meet egress width requirements and the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. The inactive leaf shall contain no doorknobs, panic bars or similar operating hardware.
5. Where a pair of doors serves patient care rooms in Group I-2 occupancies, self-latching edge- or surface-mounted bolts are permitted on the inactive leaf provided that the inactive leaf is not needed to meet egress width requirements and the inactive leaf contains no doorknobs, panic bars or similar operating hardware.

(123) Section 1010.1.9.8 is amended to read as follows:

Section 1010.1.9.8 Sensor release of electrically locked egress doors. The electric locks on sensor-released doors located in a *means of egress* in buildings with an occupancy in Groups A, B, E, I-1, I-2, I-4, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in Groups A, B, E, I-1, I-2, I-4, M, R-1 or R-2 are permitted where installed and operated in accordance with all of the following criteria:

1. The sensor shall be installed on the egress side, arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to the lock or locking system shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock-independent of other electronics-and the doors shall remain unlocked for not less than 30 seconds.
4. Activation of the building fire alarm system, where provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
5. Activation of the building *automatic sprinkler system* or fire detection system shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
6. The door locking system units shall be listed in accordance with UL 294.
7. The building must be protected throughout by an approved and monitored automatic fire sprinkler system OR an approved automatic fire/smoke detection system. Activation of the approved system shall automatically unlock the doors. The doors shall remain unlocked until the system is reset.

(124) Section 1015.8 is amended to read as follows:

Section 1015.8 Window Openings:

1015.8 Window openings. Windows in Group R-2 and R-3 buildings including dwelling units, where the top of the sill of an operable window opening is located less than 36 inches above the finished floor and more than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, shall comply with one of the following:

1. Operable windows where the top of the sill of the opening is located more than 55-ft (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.
2. Operable windows where the openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the window is in its largest opened position.
3. Operable windows where the openings are provided with window fall prevention devices that comply with ASTM F2090.
4. Operable windows that are provided with window opening control devices that comply with Section 1015.8.1.

(125) Section 1031.2 is amended to read as follows:

Section 1031.2 Reliability. Required exit accesses, exits and exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency. An exit or exit passageway shall not be used for any purpose that interferes with a means of egress.

(126) Section 1103.3 is amended to read as follows

Section 1103.3 Existing elevators. Existing elevators, escalators and moving walks shall comply with the requirements of Sections 1103.3.1 and 1103.3.2 Provide emergency signage as required by Section 607.3.

(127) Section 1103.5. 1 is added to read as follows:

1103.5.1 Spray Booths and Rooms. Existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 2404.

(128) Section 1103.7.5.1 is amended to read as follows:

Section 1103.7.5.1 Group R-1 hotel and motel manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in existing Group R-1 hotels and motels more than three stories or with more than 20 sleeping units.

Exceptions:

1. Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.

(129) Section 1103.7.8 is amended to read as follows:

Section 1103.7.8 Fire Alarm System Design Standards. Where an existing fire alarm system is upgraded or replaced, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke and/or heat detectors shall have analog initiating devices.

Exception: Existing systems need not comply unless the total building, or fire alarm system, remodel or expansion exceeds 30% of the building. When cumulative building, or fire alarm system, remodel or expansion initiated after the date of original fire alarm panel installation exceeds 50% of the building, or fire alarm system, the fire alarm system must comply within 18 months of permit application.

(130) Section 1103.7.8.1 is amended to read as follows:

Section 1103.7.8.1 Communication requirements. Refer to Section 907.6.6 for applicable requirements.

(131) Section 2304.1 is amended to read as follows:

Section 2304.1 Supervision of dispensing. The dispensing of fuel at motor fuel-dispensing facilities shall be in accordance with the following:

1. Conducted by a qualified attendant; and/or
2. Shall be under the supervision of a qualified attendant; and/or
3. Shall be an unattended self-service facility in accordance with Section 2304.3

At any time the qualified attendant of item Number 1 or 2 above is not present, such operations shall be considered as an unattended self-service facility and shall also comply with Section 2304.3.

(132) Table 3206.2. j. is amended to read as follows:

Table 3206.2. j. Where storage areas are protected by either early suppression fast response (ESFR) sprinkler systems or control mode special application sprinklers with a response time index of 50 (m • s) ¹/₂ or less that are listed to control a fire in the stored commodities with 12 or fewer sprinklers, installed in accordance with NFPA 13, manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas.

(133) Section 3310.1 is amended to read as follows:

Section 3310.1 Required access. Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting an 80,000 lb.

vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available. When fire apparatus access roads are required to be installed for any structure or development, they shall be approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

(134) Section 5601.1.3 is amended to read as follows:

Section 5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.

Exceptions:

1. Only when approved for fireworks displays, storage and handling of fireworks as allowed in Section 5604 and 5608.
2. The use of fireworks for approved fireworks displays as allowed in Section 5608.

(135) Section 5703.6 is amended to read as follows:

Section 5703.6 Piping Systems. Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with Section 5703.6.1 through 5703.6.11. An approved method of secondary containment shall be provided for underground tank and piping systems.

(136) Section 5704.2.9.5 is amended to read as follows:

Section 5704.2.9.5 Above-ground tanks inside of buildings. Above-ground tanks inside of buildings shall comply with Sections 5704.2.9.5.1 through 5704.2.9.5.3. Storage of flammable or combustible liquids or hazardous materials in above-ground tanks inside of buildings is prohibited within limits established by law in the adopting ordinance as the limits of districts in which such storage is prohibited. The storage of flammable or combustible liquids or hazardous materials in aboveground tanks is prohibited in residential areas.

(137) Section 5704.2.9.5.3 is amended to read as follows:

Section 5704.2.9.5.3 Combustible liquid storage tanks inside of buildings. The maximum aggregate allowable quantity limit shall be 3,000 gallons of Class II or III combustible liquid for storage in protected aboveground tanks complying with Section 5704.2.9.7 when all of the following conditions are met:

1. The entire 3,000 gallon quantity shall be stored in protected above-ground tanks;
2. The 3,000 gallon capacity shall be permitted to be stored in a single tank or multiple smaller tanks;

3. The tanks shall be located in a room protected by an automatic sprinkler system complying with Section 903.3.1.1; and
4. Tanks shall be connected to fuel-burning equipment, including generators, utilizing an approved closed piping system.

The quantity of combustible liquid stored in tanks complying with this section shall not be counted towards the maximum allowable quantity set forth in Table 5003.1.1(1), and such tanks shall not be required to be located in a control area. Such tanks shall not be located more than two stories below grade.

(138) Section 5704.2.9.6 is amended to read as follows:

Section 5704.2.9.6 Above-ground tanks outside of buildings. Above-ground tanks outside of buildings shall comply with Sections 5704.2.9.6.1 through 5704.2.9.6.3. The storage of flammable or combustible liquids or hazardous materials in aboveground tanks is prohibited in residential areas.

Exception: Propane tanks will be allowed where there are no natural gas utilities available in specified residential areas.

(139) Section 5704.2.11.1 is amended to read as follows:

Section 5704.2.11.1 Location. Flammable and combustible liquid storage tanks located underground, either outside or under buildings, shall be in accordance with all of the following:

1. Tanks shall be located with respect to existing foundations and supports such that the loads carried by the latter cannot be transmitted to the tank.
2. The distance from any part of a tank storing liquids to the nearest wall of a basement, pit, cellar, or lot line shall not be less than 3 feet (914 mm).
3. A minimum distance of 1 foot (305 mm), shell to shell, shall be maintained between underground tanks.
4. The storage of flammable or combustible liquids or hazardous materials in underground tanks is prohibited in residential areas.

(140) Section 5704.2.11.4 is amended to read as follows:

Section 5704.2.11.4 Leak Prevention. Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 through 5704.2.11.4.3. An *approved* method of secondary containment shall be provided for underground tank and piping systems.

(141) Section 5704.2.11.4.2 is amended to read as follows Section:

5704.2.11.4.2 Leak Detection. Underground storage tank systems shall be provided with an *approved* method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30 and as specified in Section 5704.2.11.4.3

(142) Section 5704; 2.11.4.3 is amended to read as follows:

Section 5704.2.11.4.3 Observation wells. Approved sampling tubes of a minimum 4 inches in diameter shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point 12 inches below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. Each tank site shall provide a sampling tube at the corners of the excavation with a minimum of 4 tubes. Sampling tubes shall be placed in the product line excavation within 10 feet of the tank excavation and one every 50 feet routed along product lines towards the dispensers, a minimum of two are required.

(143) Section 5704.3.8 is amended to read as follows:

Section 5704.3.8 Liquid storage warehouses. The storage of flammable liquids as specified in Chapter 57 as “Liquid Storage Warehouses” is prohibited.

(144) Section 5706.5.4.5 is amended to read as follows:

Section 5706.5.4.5 Commercial, industrial, governmental or manufacturing. Dispensing of Class I, II, and III motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles located in open areas at commercial, industrial, governmental or manufacturing establishments is allowed where permitted, provided such dispensing operations are conducted in accordance with the following:

1. Dispensing shall occur only at *approved* locations at sites that have been issued a mobile fueling site permit that allows mobile fueling by permitted mobile fueling operators in accordance with Section 105.6.17.
2. Mobile fuel delivery to vehicles located inside or on the roof level of parking structures or other buildings is prohibited.

Exception: When approved by the *fire code official*, mobile fuel delivery to vehicles located on the roof level of parking structures or other buildings may be allowed where there is exterior vehicular access from grade level.

3. The *owner* of a mobile fueling operation shall develop a written safety and emergency response plan that:
 - 3.1. establishes policies and procedures for fire safety, spill prevention and control, personnel training and compliance with other applicable requirements of this code,
 - 3.2. demonstrates readiness to respond to a fuel spill and carry out appropriate mitigation measures, and
 - 3.3. describes the process to dispose properly of contaminated materials.

The plan shall be submitted to the *fire code official* prior to approval of the permit application to conduct mobile fueling operations. It shall be maintained and updated by the permittee as needed and made available to the *fire code official* upon request.

4. A detailed site plan shall be submitted with each application for a mobile fueling site permit. The site plan shall indicate: all buildings, structures and appurtenances on site and their use or function; all uses adjacent to the lot lines of the site; the locations of all storm drain openings, adjacent waterways or wetlands; information regarding slope, natural drainage, curbing, impounding and how a spill will be retained upon the site property; and the scale of the site plan.

5. Provisions shall be made at mobile fueling sites to prevent liquids spilled during dispensing operations from flowing into buildings or off-site. Acceptable methods include, but shall not be limited to, grading driveways, raising doorsills or other *approved* means.

6. The *fire code official* is allowed to impose limits on the times and days during which mobile fueling operations are allowed to take place, and specific locations on a site where fueling is permitted.

7. Mobile fueling operations shall be conducted in areas not accessible to the public or shall be limited to times when the public is not present within 15 feet (4572 mm) of dispensing operations.

8. Mobile fueling of Class I liquids shall not take place within 25 feet (7620 mm) of buildings, *lot lines* including those on a *public way*, combustible storage or storm drains measured from the dispensing nozzle. Mobile fueling of Class II and Class III liquids shall not take place within 15 feet (4572 mm) of buildings, *lot lines* including those on a *public way*, combustible storage or storm drains measured from the dispensing nozzle.

Exceptions:

1. The distance to storm drains shall not apply where an approved storm drain cover or an approved equivalent that will prevent any fuel from reaching the drain is in place prior to fueling or a fueling hose being placed within the applicable setback distance from the drain. Where placement of a storm drain cover will cause the accumulation of excessive water or difficulty in conducting the fueling, such cover shall not be used and the fueling shall not take place within the applicable setback distance from the drain.
2. The distance to storm drains shall not apply for drains that direct influent to approved *oil* interceptors.
3. Where *approved* by the *fire code official* and where an *approved* means of vapor recovery is utilized during fueling operations, mobile fueling of Class I liquids shall not take place within 15 feet (7620 mm) of buildings, *lot lines* including

those on a *public way*, combustible storage or storm drains measured from the dispensing nozzle.

9. The tank vehicle shall comply with the requirements of Section 5706.6, NFPA 385 and local, state and federal requirements. The tank vehicle's specific functions shall include that of supplying fuel to motor vehicle fuel tanks. The vehicle and all its equipment shall be maintained in good repair.

10. Tank vehicles used to dispense Class I fuels into the fuel tanks of motor vehicles shall have a maximum aggregate cargo capacity of 1,200 gallons.

11. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the tank vehicle or the point of fueling shall be prominently posted on not less than three sides of the vehicle including the back and both sides.

12. A portable fire extinguisher with a minimum rating of 40:BC shall be provided on the tank vehicle with signage clearly indicating its location.

13. Mobile fueling equipment and appurtenances shall be of an *approved* or *listed* type.

14. The dispensing hose of Class II and III liquids shall not be extended from the reel more than 100 feet (30 480 mm) in length. The dispensing hose of Class I liquids shall not be extended from the reel more than 50 feet (15 240 mm) in length.

15. Absorbent materials, non-water-absorbent pads, a 10-foot-long (3048 mm) containment boom, an approved container with lid and a nonmetallic shovel shall be provided to mitigate a minimum 5-gallon (19 L) fuel spill.

16. Tank vehicles shall be equipped with a "fuel limit" switch, such as a count-back switch, to limit the amount of a single fueling operation to not more than 500 gallons (1893 L) of Class II or III liquids or 30 gallons (13.6 L) of Class I liquids before resetting the limit switch.

Exception: Tank vehicles where the operator carries and can utilize a remote emergency shutoff device which, when activated, immediately causes flow of fuel from the tank vehicle to cease.

17. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak or spill. Training records shall be maintained by the dispensing company.

18. Operators of tank vehicles used for mobile fueling operations shall have in their possession at all times an emergency communications device to notify the proper authorities in the event of an emergency.

19. The tank vehicle dispensing equipment shall be constantly attended and operated only by designated personnel who are trained to handle and dispense motor fuels.

20. Fuel dispensing shall be prohibited within 25 feet (7620 mm) of any source of ignition. Fixed or portable electrical equipment located within 5 feet (1524 mm) of the point of connection, extending in all directions, and up to 18 inches (450 mm) above grade level within a horizontal radius of 10 feet (3048 mm) from Class I liquid dispensing operations shall be rated for use in Class I, Division 2 hazardous locations in accordance with NFPA 70.

21. The engines of vehicles being fueled shall be shut off during dispensing operations.

22. Nighttime fueling operations shall ~~only~~ take place only in adequately-lighted areas.

23. The tank vehicle shall be positioned with respect to vehicles being fueled to prevent traffic from driving over the delivery hose.

24. Tank vehicles and fuel delivery equipment shall not be positioned in a manner that obstructs emergency vehicle access roads.

25. The parking or staging and garaging of tank vehicles shall comply with Section 5706.6.2. Tank vehicles shall not be used as storage tanks.

26. During fueling operations, tank vehicle brakes shall be set, chock blocks shall be in place and warning lights shall be in operation.

27. Motor vehicle fuel tanks shall not be topped off.

28. The dispensing hose shall be properly placed on an *approved* reel or in an *approved* compartment prior to moving the tank vehicle.

29. The *fire code official* and other appropriate authorities shall be immediately notified when a reportable spill or unauthorized discharge occurs.

30. Operators shall place a drip pan or an absorbent pillow under each fuel fill opening prior to and during dispensing operations. Drip pans shall be liquid-tight. The pan or absorbent pillows shall have a capacity of not less than 3 gallons (11.36 L). Spills retained in the drip pan or absorbent pillow need not be reported. Operators, when fueling, shall have on their person an absorbent pad capable of capturing fuel overfills. Except during fueling, the nozzle shall face upward and an absorbent pad shall be kept under the nozzle to catch drips. Contaminated absorbent pads or pillows shall be disposed of regularly in accordance with local, state and federal regulations.

Exception: The pan or absorbent pillows shall have a capacity of not less than 1 gallon (3.79 L) when single fueling operations are limited to not more than 30 gallons.

(145) Section 5706.5.4.6 is added to read as follows:

Section 5706.5.4.6 Commercial, industrial, governmental or manufacturing or other approved locations from other than tank vehicles. Dispensing of Class I, II and III motor vehicle fuel from mobile fueling vehicles not classified as tank vehicles into the fuel tanks of motor vehicles located in open areas at commercial, industrial, governmental or manufacturing establishments, or other approved locations is allowed where permitted, provided such dispensing operations are conducted in accordance with this section.

Individual fuel supply tanks for mobile fueling installed on mobile fueling vehicles used to dispense fuels into the fuel tanks of motor vehicles shall have a maximum individual fuel capacity of 110 gallons. The maximum aggregate amount of all mobile fueling fuel supply tanks shall not exceed that allowed by local, state, and federal regulations not to exceed 1,100 gallons.

1. Dispensing shall occur only at *approved* locations that have been issued a mobile fueling site permit that allows mobile fueling by permitted mobile fueling operators in accordance with Section 105.6.17.
2. Mobile fuel delivery to vehicles located inside or on the roof level of parking structures or other buildings is prohibited.

Exception: When approved by the fire code official, mobile fuel delivery to vehicles located on the roof level of parking structures or other buildings may be allowed where there is exterior vehicular access from grade level.

3. The *owner* of a mobile fueling operation shall develop and provide a written safety and emergency response plan that:
 - 3.1. establishes policies and procedures for fire safety, spill prevention and control, personnel training and compliance with other applicable requirements of this code;
 - 3.2. demonstrates readiness to respond to a fuel spill and carry out appropriate mitigation measures; and
 - 3.3. describes the process to dispose properly of contaminated materials.

The plan shall be submitted to the *fire code official* prior to approval of the permit application to conduct mobile fueling operations. It shall be maintained and updated when necessary by the permittee. Any modifications to an approved plan shall be submitted as needed and made available to the *fire code official* for review and approval.

4. The times and days during which mobile fueling operations are permitted to take place shall be approved by the *fire code official*. Nighttime fueling operations shall only take place only in adequately-lighted areas.

5. Where required by the fire code official, a detailed site plan shall be submitted with each application for a mobile fueling site permit. The site plan shall indicate: all buildings, structures and appurtenances on site and their use or function; all uses adjacent to the lot lines of the site; the locations of all storm drain openings, adjacent waterways or wetlands; information regarding slope, natural drainage, curbing, impounding and how a spill will be retained upon the site property; and the scale of the site plan.

6. Provisions shall be made at mobile fueling locations to prevent liquids spilled during dispensing operations from flowing into buildings or off-site. Acceptable methods include, but shall not be limited to, grading driveways, raising doorsills, placement of absorbent socks, booms or pads or other *approved* means.

7. Mobile fueling of Class II or III liquids shall not take place within 15 feet (4572 mm) of buildings, property lines, combustible storage or storm drains. Mobile fueling of Class I liquids shall not take place within 25 feet (7620 mm) of buildings, *lot lines*, public streets, public alleys, *public ways*, combustible storage or storm drains measured from the dispensing nozzle.

Exception: The distance to storm drains shall not apply where an approved storm drain cover or an approved equivalent that will prevent any fuel from reaching the drain is in place prior to fueling.

8. Fuel dispensing shall be prohibited within 25 feet (7620 mm) of sources of ignition, including electrical, in accordance with 5003.7. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the mobile fueling vehicle or the point of fueling shall be prominently posted on not less than three sides of the vehicle including the back and both sides. The engines of vehicles being fueled shall be shut off during dispensing operations.

9. The dispensing hose used for dispensing of Class II and III liquids shall not be extended from the reel more than 100 feet (30 480 mm) in length. The dispensing hose used for dispensing of Class I liquids shall not be extended from the reel more than 50 feet (15 240 mm) in length. The nozzle, when the hose is fully extended, shall not reach within 5 feet (1524 mm) of building openings.

10. Mobile fueling vehicles and fuel delivery equipment shall not be positioned in a manner that obstructs emergency vehicle access roads. The mobile fueling vehicle shall be positioned with respect to vehicles being fueled to prevent traffic from driving over the delivery hose.

11. Mobile fueling vehicles shall be equipped with a “fuel limit” switch, such as a count-back switch, to limit the amount of a single fueling operation to not more than 30 gallons before resetting the limit switch.

Exception: Mobile fueling vehicles where the operator carries and can utilize a remote emergency shut off device which, when activated, immediately causes flow of fuel from the tank vehicle to cease.

12. Absorbent materials, non-water-absorbent pads, containment booms, an approved container with lid and a nonmetallic shovel shall be provided to mitigate potential spills.
13. The mobile fueling vehicle dispensing equipment shall be constantly attended and operated only by designated personnel who are trained to handle and dispense motor fuels.
14. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak or spill. Training records shall be maintained by the dispensing company and made available to the fire code official.
15. A portable fire extinguisher with a minimum rating of 40:BC shall be provided on the mobile fueling vehicle with signage clearly indicating its location.
16. Operators of mobile fueling vehicles used for mobile fueling operations shall have in their possession at all times an emergency communication device to notify the proper authorities in the event of an emergency.
17. During fueling operations, mobile fueling vehicles brakes shall be set, chock blocks shall be in place and warning lights shall be in operation.
18. Operators shall place an absorbent pillow under each fuel fill opening prior to and during dispensing operations. The absorbent pillows shall have a capacity of not less than 1 gallon. Spills retained in absorbent pillow need not be reported.
19. The engines of vehicles being fueled shall be shut off during dispensing operations.
20. Any unauthorized discharge of motor fuel shall comply with Section 5003.3.1.
21. The dispensing hose shall be properly secured on an *approved* reel or in an *approved* compartment prior to moving the tank vehicles.
22. The parking or staging and garaging of mobile fueling vehicles shall comply with Section 5706.6.2. Mobile fueling vehicles shall not be used as storage tanks.
23. The tank vehicle's specific function shall include that of supplying fuel to motor vehicle fuel tanks. The vehicle and all its equipment shall be maintained in good repair.
24. Mobile fueling vehicles shall comply with applicable local, state and federal requirements. Documentation shall be provided upon request.

25. Individual fuel supply tanks for mobile fueling installed on mobile fueling vehicles used to dispense fuels into the fuel tanks of motor vehicles shall have a maximum individual fuel capacity of 110 gallons. The maximum aggregate amount of all mobile fueling fuel supply tanks shall not exceed that allowed by local, state, and federal regulations not to exceed 1,100 gallons.

26. Individual fuel supply tanks for mobile fueling shall not be manifold together through the same dispensing pump.

27. Mobile fuel dispensing equipment and appurtenances shall be *listed* or *approved*.

28. Mobile fueling operations shall be limited to times when the public is not present within 15 feet (4572 mm) of dispensing operations.

(146) Section 5706.5.4.7 is added to read as follows:

Section 5706.5.4.7 Dispensing motor vehicle fuel from portable containers.

Dispensing of Class I, II and III motor vehicle fuel from portable containers into the fuel tanks of motor vehicles where the aggregate container capacity does not exceed 60 gallons is allowed where permitted within jurisdictions, provided such dispensing operations are conducted in accordance with the following:

Exception: Fueling from approved portable containers in cases of an emergency or for personal use.

1. Where required, the mobile fueling operator shall be required to obtain a permit with *the fire code official*.

2. The *operator* of a mobile fueling operation shall develop a written safety and emergency response plan that

2.1. establishes policies and procedures for fire safety, spill prevention and control, personnel training and compliance with other applicable requirements of this code,

2.2. demonstrates readiness to respond to a fuel spill and carry out appropriate mitigation measures, and

2.3. describes the process to dispose properly of contaminated materials.

The plan shall be made available to the *fire code official* at the time of the vehicle registration with the *fire code official*. The plan shall be maintained and updated by the operator as needed and made available to the *fire code official* upon request.

3. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak or spill. Training records shall be maintained by the fuel dispensing company.

4. Dispensing shall be conducted using Safety cans shall be listed in accordance with UL 30 and a maximum capacity of 5 gallons are used in dispensing operations.

5. Fuel dispensing shall not take place within 15 feet (4572 mm) of buildings or storm drains.

Exceptions:

1. The distance to storm drains shall not apply where an approved storm drain cover or an approved equivalent that will prevent any fuel from reaching the drain is in place prior to fueling. Where placement of a storm drain cover will cause the accumulation of excessive water or difficulty in conducting the fueling, such cover shall not be used and the fueling shall not take place within 15 feet (4572 mm) of a drain.

2. The distance to storm drains shall not apply for drains that direct influent to approved oil receptors.

6. Mobile fuel delivery to vehicles located inside or on the roof level of parking structures or other buildings is prohibited.

Exception: When approved by the fire code official, mobile fuel delivery to vehicles located on the roof level of parking structures or other buildings may be allowed where there is exterior vehicular access from grade level.

7. Fuel deliver vehicle brakes shall be set and hazard lights shall be activated during dispensing operations.

8. The engines of the vehicles being fueled shall be shut off during dispensing operations.

9. Fuel dispensing shall be prohibited within 25 feet (7620 mm) of sources of ignition, including electrical, in accordance with 5003.7. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the service vehicle or the point of fueling shall be prominently posted on not less than three sides of the vehicle including the back and both sides. The engines of vehicles being fueled shall be shut off during dispensing operations.

10. Nighttime fueling operations shall only take place in adequately lighted areas.

11. Operators of *fuel delivery vehicles* shall have in their possession at all times an emergency communication device to notify the proper authorities in the event of an emergency.

12. At least one portable fire extinguisher with a minimum rating of 40:BC shall be provided on the fuel delivery vehicle with signage clearly indicating its location.

13. Absorbent materials, non-water-absorbent pads, an approved container with lid and a nonmetallic shovel shall be provided on the fuel delivery vehicle to mitigate a minimum 5-gallon (19 L) fuel spill.

14. A means shall be provided to prevent liquids spilled during dispensing operations from flowing into buildings or off-site. Acceptable methods include, but shall not be limited to, drop pans, absorbent pads and other approved means.

15. Any unauthorized discharge of motor fuel shall comply with Section 5003.3.1.

16. Mobile fueling operations shall be limited to times when the public is not present within 15 feet (4572 mm) of dispensing operations.

(147) Section 6103.2.1.8 is amended to read as follows:

Section 6103.2.1.8 Jewelry Repair, Dental Labs and Similar Occupancies. Where natural gas service is not available, portable LP-Gas containers are allowed to be used to supply approved torch assemblies or similar appliances. Such containers shall not exceed 20- pound (9.0 kg) water capacity. Aggregate capacity shall not exceed 60-pound (27.2 kg) water capacity. Each device shall be separated from other containers by a distance of not less than 20 feet.

(148) Section 6104.2 is amended to read as follows:

Section 6104.2 Maximum capacity within established limits. Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570L)

Exceptions: In particular installations, this capacity limit shall be determined by the fire code official, after consideration of special features such as topographical conditions, nature of occupancy, and proximity to buildings, capacity of proposed LP-gas containers, degree of fire protection to be provided and capabilities of the local fire department.

(149) Section 6104.3.2 is amended to read as follows:

Section 6104.3.2 Spas, Pool Heaters, and Other Listed Devices. Where natural gas service is not available, an LP-gas container is allowed to be used to supply spa and pool heaters or other listed devices. Such container shall not exceed 250-gallon water capacity per lot. See Table 6104.3 for location of containers.

Exception: Lots where LP-gas can be off-loaded wholly on the property where the tank is located may install up to 500 gallons above ground or 1,000 gallons underground approved containers.

(150) Section 6107.4 is amended to read as follows:

Section 6107.4 Protecting Containers from Vehicles. Where exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with Section 312.

(151) Section 6109.13 is amended to read as follows:

Section 6109.13 Protection of Containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by Section 6107.4.

(152) Appendices B, C, D, E, F, G, H and I of the 2015 International Fire Code are hereby included in the adoption of this ordinance..

SECTION 3. ENFORCEMENT AND PENALTIES

- (a) Any person, firm partnership, association or corporation who shall violate any of the provisions of this Ordinance shall be guilty of a misdemeanor, and upon conviction thereof in the Municipal Court of the City of Cedar Hill, Texas, such violation shall be punishable by a **fine in an amount not to exceed Two Thousand Dollars (\$2,000)**. Each and every instance of the violation of this Ordinance constitutes a separate offense and shall be punishable by separate fines for each offense.
- (b) Nothing in this article shall preclude the city's pursuit of any and all other remedies allowed under the civil and criminal statutes of the State of Texas, and in equity, including, but not necessarily limited to, Chapter 54, Subchapter B, of the Texas Local Government Code, to prosecute civil suits for enforcement, injunctive relief, and civil penalties. Neither shall the city be required, nor prohibited, to issue criminal citations before, after, or during any proceeding prescribed in this article.

SECTION 3. SAVINGS CLAUSE

In the event that any other Ordinance of the City of Cedar Hill, Texas, heretofore enacted is found to conflict with the provisions of the Ordinance, this Ordinance shall prevail.

SECTION 4. SEVERANCE CLAUSE

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, such shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions thereof.

SECTION 5. INCORPORATION INTO CODE OF ORDINANCES

The provisions of this ordinance shall be included and incorporated in the Code of Ordinances, City of Cedar Hill, Texas, as an addition, amendment thereto, and shall be appropriately renumbered to conform to the uniform numbering system of the Code.

SECTION 6. EFFECTIVE DATE

Because of the nature of interest and safeguard sought to be protected by this Ordinance and in the interest of health, safety and welfare of the citizens of the City of Cedar Hill, Texas, this Ordinance shall take effect immediately after passage, approval and publication, as required by law.

SECTION 7. PUBLICATION

The City Secretary is hereby authorized and directed to cause publication of the descriptive caption and penalty clause hereof as an alternative method of publication provided by law.

PASSED, ADOPTED and APPROVED by the City Council of the City of Cedar Hill, Texas on, this the ____ day of _____, 2017.

Rob Frank, Mayor

ATTEST:

Belinda Berg, City Secretary

APPROVED AS TO FORM:

Ron G. MacFarlane, Jr., City Attorney