# 2021 International Fire Code Amendments

***Section 102.1; change #3 to read as follows:**

3. Existing structures, facilities, and conditions when required in Chapter 11 or in specific sections of this code.

***Add Section 104.1.2 to read as follows:***

**Section 104.1.2 Fire department authority, disconnection of utilities and evacuation.** The Fire Chief, Fire Marshal, and other fire department personnel approved by the Fire Chief or Fire Marshal shall be authorized to issue citations for violations of this code and to pursue other legal remedies allowed by law. Citations may be issued for any violation of this code, or any other code, policy or standard, over which the fire department has jurisdiction. Citations for any violation may be issued to the owner, lessee, manager, person in control of the property, and/or any other individual who is responsible for the violation or the property on which a violation occurs. The specific intent of this code is to place the obligation of complying with its requirements upon the owner or occupier of premises, buildings or structures within its scope. No provision or term used in this code is intended to impose any duty whatsoever upon the city or any of its officers or employees, for whom the implementation or enforcement of this code shall be discretionary, not mandatory. Nothing contained in this ordinance is intended to, nor shall be construed to, create or form the basis for any liability on the part of the city, or its officers, employees or agents, for any injury or damage resulting from the failure of the owner or occupier of premises, buildings or structures to comply with this code, or for any injury or damage caused by any act or omission on the part of the city by its officers, employees or agents in the course of implementing or enforcing this code.

The Fire Chief, Fire Marshal or any authorized member of the fire department may order an operation or use stopped, or the evacuation of any area, premises, building or vehicle or portion thereof, which contains or is a fire or life safety hazard or when it is deemed necessary in the interest of public safety or the safety of emergency responders. It shall be unlawful for any person to refuse to evacuate upon such order or to resist or obstruct the evacuation of another person. The Fire Chief, Fire Marshal or their designees shall further have the authority to order the disconnection of utilities to a building or portion thereof to alleviate an immediate and imminent threat to life or property that is occurring in violation of the codes or to alleviate a fire or life safety hazard that causes an immediate threat to a building or a person. It is unlawful for any person to resist, interfere with or refuse to comply with an order issued under this section.

***Section 104.8.2; add the following sentences to the paragraph:***

The fire code official may require any plans submitted to be reviewed by an approved outside professional engineer or appropriate specialist when, in the opinion of the code authority, there exists special technical knowledge to conduct a satisfactory review of the plans and such special knowledge is not available among the fire department staff. Fees associated with outside plan reviews are the sole responsibility of the submitting party.

***Add Section 104.11.4 to read as follows:***

**104.11.4 Closure of public ways.** Any member of the fire department shall have the authority to close or restrict access to any street, alley, sidewalk, public or private place, or portion thereof, when necessary for purposes of public safety involving City of Saginaw employees or the general public. It shall be unlawful for any person or vehicle to disregard or proceed past barricades, barricade tape, traffic cones, or emergency vehicles positioned to obstruct an area, or any uniformed or identified City of Saginaw employee directing persons or vehicles.

***Section 105.2.1; add a second paragraph to read as follows:***

If the application for a permit describes or has the potential to create a hazard that, in the opinion of the Fire Chief or fire code official, exceeds the current response, emergency operating, and/or equipment capabilities of the fire department, the fire code official shall not issue a permit. The permit shall not be issued until such time that, in the opinion of the Fire Chief or fire code official, the fire department has attained the needed personnel, training, apparatus and equipment required to adequately handle any potential hazard or incident related to the issuance of said permit.

*****Section 105.3.3; change to read as follows:***

**105.3.3 Occupancy Prohibited before Approval.** The building or structure shall not be occupied prior to the fire code official issuing a permit when required and conducting associated inspections indicating the applicable provisions of this code have been met.

*****Section 105.6.25; add to read as follows:***

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

***Section 111.1; change to read as follows:***

**109.1 Board of appeals established.** In order to hear and decide appeals of orders, decisions, determinations, permit denial/revocation, made by the fire code official relative to the application and interpretation of the code, there shall be and is hereby created a board of appeals. The board of appeals shall consist of the City Manager, the Fire Chief, the building official, and the fire code official. The fire code official shall be an ex officio member of said board but shall have no vote on any matter before the board. Any appeal to the board shall be made within thirty (30) days of the disputed order, decision, determination and/or permit denial/revocation. The board of appeals shall hold office at its pleasure. The board shall render all decisions and findings in writing to the appellant with a duplicate copy kept on record by the fire code official.

***Delete section 111.3***

*****Section 202; amend and add definitions to read as follows:***

**** [B] 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 or staff has accepted responsibility for care recipients already incapable. This group may include but not be limited to the following:

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

**** [B] ATRIUM.** An opening connecting three or more stories… *{remaining text unchanged}*

**** [B] 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.

****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.

****FIREWORKS.** Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, *deflagration*, ~~or~~ *detonation*, and/or activated by ignition with a match or other heat producing device that meets the definition of 1.3G fireworks or 1.4G fireworks. … *{Remainder of text unchanged}…*

**HAZARDOUS MATERIALS.** Any material in a quantity, form, or concentration or any material exhibiting physical or chemical characteristics which, in the determination of fire department personnel, may pose a real, unreasonable and/or imminent risk to the life, health or safety of persons, property or the environment. This shall include but not be limited to such substances as explosives, radioactive materials, petroleum or petroleum products or gases, poisons, compressed gases, oxidizers, ebiologic (biologic) agents, flammables, combustibles, corrosives, and/or chemicals used to produce illicit drugs. This includes substances or materials that are in usable or waste condition.

**HIGH-PILED COMBUSTIBLE STORAGE**. Any building classified as a group S Occupancy or Speculative Building exceeding 6,000 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 (speculative warehouse), a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum pile height.

**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.

****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.

****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.

****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 as normally calculated by the jurisdiction.

**UNATTENDED.** No person/s present to listen, watch, participate, accompany, guard or take care of an object, location or area.

****UPGRADED OR REPLACED FIRE ALARM SYSTEM.** A fire alarm system that is upgraded or replaced includes, but is not limited to the following:

- Replacing one 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 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

***Section 307.1; change to read as follows:***

**307.1 General.** Open Burning. It shall be unlawful to burn or cause to be burned any flammables or combustibles including uncut grass, weeds. timber, rubbish, leaves, or any other natural or synthetic materials on any street, alley, lot, premises or facility. Such prohibited fires shall include bonfires and fires used for ceremonial purposes.

**Exceptions:**

1. Burning may be conducted for purposes of cooking and heating when specified elsewhere in this code. Permitted cooking and heating shall be performed in devices designated for such purposes by the manufacturer.
2. Burning as permitted by sections 307.1.1 through 307.5

*****Section 307.1.1; change to read as follows:***

**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**: {No change.}

*****Section 307.2; change to read as follows:***

**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 (TCEQ) 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*.

*****Section 307.3; change to read as follows:***

**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.

******Section 307.4 and 307.4.1; change to read as follows:***

**307.4 Location.** The location for 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**: {No change.}

**307.4.1 Bonfires**. A bonfire shall not be conducted within 50 feet (15 240 mm), or greater distance as determined by the fire code official, of a structure or combustible material, unless the fire is contained in a barbecue pit. Conditions that could cause a fire to spread within the required setback of a structure shall be eliminated prior to ignition.

*****Section 307.4.3, Exceptions; add Exception #2 to read as follows:***

**Exceptions:**

1. Portable outdoor fireplaces used at one- and two-family dwellings.

*****Section 307.4.4 and 307.4.5; change to read as follows:***

**307.4.4 Permanent Outdoor Firepit.** Permanently installed outdoor firepits 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 Residential Code or International Building Code.

**307.4.5 Trench Burns.** Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2.

***Section 307.5; change to read as follows:***

**307.5 Attendance.** *Open burning*, trench burns, bonfires, *recreational fires*, and use of portable outdoor fireplaces shall be constantly attended until the… *{Remainder of section unchanged}*

***Section 308.1.4; change to read as follows:***

**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 dwellings where 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 pounds (5 containers). All LP-gas containers shall be stored outside, as per Chapter 61.

***Section 308.1.6.2, Exception #3; change to read as follows:***

3. Torches or flame-producing devices in accordance with Section 308.1.3.

***Section 308.1.6.3; change to read as follows:***

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

***Section 311.5; change to read as follows:***

**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 114 of this code relating to structural or interior hazards, as required by Section 311.5.1 through 311.5.5.

***Add sections 316.7 and 316.8 to read as follows:***

**BURNED OR PARTIALLY BURNED DEBRIS OR STRUCTURES**

**316.7 Removal of debris or partially burned building after a fire.** The owner or person having under his control or in his possession upon any premises any hay, straw, bales of wool, cotton, paper, or other substances which have been rendered useless or unmarketable by reason of any fire on such premises, or any debris resulting from such fire shall remove the same from such premises within forty-eight hours after notice to do so has been given by the code official.

**316.8 Burned or partially burned structure.** Whenever any building or other structure is partially burned, the owner thereof or the person in charge or control thereof, within ten days after notice from the code official, shall remove from the premises all refuse, debris, charred and partially burned lumber, and material. If such building or other structure is burned to such an extent that it is rendered incapable of being repaired, the owner of the property upon which same is located or the person in control thereof, within ten (10) days after notice from the code official, shall remove from the premises all of the remaining portion of the building or structure.

*****Section 403.4; change to read as follows:***

**403.4 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 403.4.1 through 403.4.3.

*****Section 404.2.2; add Number 4.10. to read as follows:***

4.10. Fire extinguishing system controls.

******Section 405.5; change to read as follows:***

**405.5 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.

**Exceptions:**

1. {No change.}
2. {No change.}
3. Notification of teachers/staff having supervision of light- or sound-sensitive students/occupants, such as those on the autism spectrum, for the protection of those students/occupants, shall be allowed prior to conducting a drill.

*****Section 501.4; change to read as follows:***

**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. Unless other wise approved by the fire code official.

*****Section 503.1.1; add sentence to read as follows:***

Except for one- or two-family dwellings, the path of measurement shall be along a minimum of a 10 feet (3048 mm) wide unobstructed pathway around the external walls of the structure.

***Add section 503.1.2.1 to read as follows:***

**Section 503.1.2.1 Fire Zone.** When the fire code official determines that an area or zone is necessary to gain immediate access to any fire protection equipment, appliances, vault, connection or hydrant or to gain access for fire department entry to a building for the purpose of fire fighting or life safety, the area shall be marked or posted as approved by the fire code official for such identification. It shall be unlawful to obstruct, cause to be obstructed, or otherwise impede access of the fire department in a marked fire apparatus access road or fire zone. Vehicles or obstructions in a fire apparatus access road or fire zone may be towed or otherwise removed at the owner's expense. For purposes of this section a "Fire Zone" is defined as an area marked by fire lane markings or signs that include a defined area other than a fire lane. A fire zone may include a portion of curbing adjacent to a sprinkler connection, a gate opening across a fire lane, or other clearly defined areas outside of a fire lane.

*****Section 503.2.1; change to read as follows:*** **503.2.1 Dimensions.** Fire apparatus access roads shall have an unobstructed width of not less than 24 feet (7315 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 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.

*****Section 503.2.2; change 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 or where necessary to meet the public safety objectives.

******Section 503.2.3; change Section 503.2.3 to read as follows:***

**503.2.3 Surface.** Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities. Minimum requirements for fire apparatus access roads shall be concrete, six inches (6”) in depth, utilizing number four (#4) reinforced steel located on eighteen inch (18”) centers. All fire apparatus access road surfaces shall be maintained in an approved condition to prevent the effect of slowing or impeding the response of or damage to fire department apparatus.

***Sub-grade.*** The compressive strength shall be not less than 4,000 psi in 28 days. A geotechnical report sealed by a licensed professional engineer in the State of Texas shall provide recommendations for sub-grade thickness and stabilization methods. In the absence of a geotechnical report, the minimum sub-grade thickness shall be eight (8) inches with the stabilization method determined by the City Engineer.

***Section 503.3; change to read as follows:***

**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 "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

**(2) Signs** – Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high. Signs shall be painted on a white background with letters and borders in red, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

***Section 503.4; change 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, standing or stopping of a vehicle other than a vehicle operated by the fire department, police department or other governmental agency in the performance of emergency operations or in the performance of fire prevention activities. The minimum widths and clearances established in Section 503.2.1, and any other area marked as a fire lane as described in Section 503.3, shall be maintained at all times.

***Section 505.1; change 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 6 inches (152.4 mm) high 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 the building cannot be viewed from the public way, a monument, pole or other sign with approved 6 inch (152.4 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 means shall be used to identify the structure. Numerals or addresses shall be posted on a minimum 20 inch (508 mm) by 30 inch (762 mm) background on border. Address identification shall be maintained.

**Exception:** R-3 Single Family occupancies shall have approved numerals of a minimum 3 ½ 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.

***Add section 505.3 to read as follows:***

**505.3 Business or Facility Name** New and existing buildings and facilities shall have the business or facility name placed in a position that is plainly legible and visible from the street or road fronting the property. Lettering shall be a minimum of 6 inches with a minimum stroke width of .5 inches.

***Add section 506.1.3 to read as follows:***

**506.1.3 Electronic devices.** On gates, doors and other similar barriers that are electronically operated, an approved electronic over-ride operating device in combination with an approved manual over-ride ***operating device shall be installed.***

*****Section 507.4; change 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.

***Section 507.5.1; change to read as follows:***

**507.5.1 Where required.** Where a portion of a facility or building hereafter constructed or moved into or within the jurisdiction is more than 300 feet from a water supply on a public street, as measured by an approved route around the exterior of the facility or building, approved on-site fire hydrants and mains shall be provided where required by the fire code official. Locations of the on-site hydrants shall be approved by the fire code official.

***Section 507.5.1.1; change to read as follows:***

**507.5.1.1** An approved fire hydrant shall be installed within 50 feet of all fire department connections.

**Delete Exception.**

***Add sections 507.5.1.2, 507.5.1.3 to read as follows:***

**507.5.1.2 Hydrant Spacing.** Fire hydrants shall be spaced in accordance with the following:

R-3 and U occupancies – 500 feet spacing

All others – 300 feet spacing

**507.5.1.3 Additional locations.** Approved fire hydrants shall be provided at all intersecting streets and at intermediate locations between intersecting streets to meet the following spacing requirements:

R-3 and U occupancies – 500 feet spacing

All others – 300 feet spacing

*****Section 507.5.4; change to read as follows:***

**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.

*****Section 509.1.2; add to read as follows:***

**509.1.2 Sign Requirements.** Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of 2 inches (50.8 mm) when located inside a building and 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.

******Section 605.4 through 605.4.2.2 ; change to read as follows:***

**605.4 Fuel oil storage systems.** Fuel oil storage systems shall be installed and maintained in accordance with this code. Tanks and fuel-oil piping systems shall be installed in accordance with Chapter 13 of the *International Mechanical Code* and Chapter 57.

**605.4.1 Fuel oil storage in outside, above-ground tanks.** Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L). The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) shall comply with NFPA 31 and Chapter 57.

**605.4.1.1 Approval.** Outdoor fuel oil storage tanks shall be in accordance with UL 142 or UL 2085, and also listed as double-wall/secondary containment tanks.

**605.4.2 Fuel oil storage inside buildings.** Fuel oil storage inside buildings shall comply with Sections 605.4.2.2 through 605.4.2.8 and Chapter 57.

**605.4.2.1 Approval.** Indoor fuel oil storage tanks shall be in accordance with UL 80, UL 142 or UL 2085.

**605.4.2.2 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 tanks shall not exceed the following:

1. 660 gallons (2498 L) in unsprinklered buildings, where stored in a tank complying with UL 80, UL 142 or UL 2085, and also listed as a double-wall/secondary containment tank for Class II liquids.
2. 1,320 gallons (4996 L) in buildings equipped with an *automatic sprinkler* system in accordance with Section 903.3.1.1, where stored in a tank complying with UL 142 or UL 2085. The tank shall be listed as a secondary containment tank, and the secondary containment shall be monitored visually or automatically.
3. 3,000 gallons (11 356 L) in buildings equipped with an *automatic sprinkler* system in accordance with Section 903.3.1.1, where stored in protected above-ground tanks complying with UL 2085 and Section 5704.2.9.7. The tank shall be listed as a secondary containment tank, as required by UL 2085, and the secondary containment shall be monitored visually or automatically.

***Section 603.8; change to read as follows:***

**603.8 Incinerators.** Incinerators of any type are not permitted to be constructed within the city limits of Saginaw. All existing incinerators constructed prior to the adoption of this code shall not be used in any manner for the purpose of burning any material or product.

***Delete sections 603.8.1 through 603.8.5***

*****Section 807.5.2.2 and 807.5.2.3 applicable to Group E occupancies; change to read as follows:***

**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.

**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.

***Section 807.5.5.2 and 807.5.5.3 applicable to Group I-4 occupancies; change to read as follows:***

**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.

**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.

***Section 901.6.1.1; add 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 backflushed or inspected by approved camera when foreign material is present or when caps are missing, 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*.

*****Section 901.6.4; add to read as follows:***

**901.6.4 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.

*****Section 901.7; change 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 as determined by the fire code official, 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.… *{Remaining text unchanged}*

***Section 901.9; change Section 901.9 to read as follows:***

**901.9 Discontinuation or change of service.** Notice shall be made to the fire code official whenever contracted alarm services for monitoring of any fire alarm system are terminated for any reason, or a change in alarm monitoring provider occurs. Notice shall be made in writing to the fire code official by the building owner and monitoring service provider prior to the service being terminated.

*****Section 903.1.1; change to read as follows:***

**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*.

***Section 903.2: add paragraph to read as follows:***

Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, 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."

***Section 903.2; delete the exception.***

****Section 903.2.4.2; change to read as follows:***

**903.2.4.2 Group F-1 distilled spirits.** An automatic sprinkler system shall be provided throughout a Group F-1 fire area used for the manufacture of distilled spirits involving more than 120 gallons of distilled spirits (>16% alcohol) in the fire area at any one time.

****Section 903.2.9.3; change to read as follows:***

**903.2.9.3 Group S-1 distilled spirits or wine.** An automatic sprinkler system shall be provided throughout a Group S-1 fire area used for the bulk storage of distilled spirits or wine involving more than 120 gallons of distilled spirits or wine (>16% alcohol) in the fire area at any one time.

***Section 903.2.9.4 and 903.2.9.5; delete Exception to 903.2.9.4 and add Section 903.2.9.5 to read as follows:***

**903.2.9.5 Self-Service Storage Facility.** An automatic sprinkler system shall be installed throughout all self-service storage facilities.

**Section 903.2.11; change 903.2.11.3 and add 903.2.11.7, 903.2.11.8, and 903.2.11.9 as follows:**

**903.2.11.3 Buildings 35 feet or more in height.** An automatic sprinkler system shall be installed throughout buildings with a floor level, other than penthouses in compliance with Section 1509 of the International Building Code, that is located 35 feet (10 668 mm) or more above the lowest level of fire department vehicle access.

Exceptions:

1. Open parking structures in compliance with Section 406.5 of the International Building Code.

**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.

**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.

**903.2.11.9** Buildings Over 6,000 sq. ft. An automatic sprinkler system shall be installed throughout all buildings with a building area 6,000 sq. ft. or greater and in all existing buildings that are enlarged to be 6,000 sq. ft. or greater. For the purpose of this provision, fire walls shall not define separate buildings.

**Exception:** Open parking garages in compliance with Section 406.5 of the International Building Code

**903.2.11.11 Existing Lease Space Structures.** Existing multi-use lease spaces shall be permitted to expand any single existing lease space within a building without being required to install an automatic sprinkler system unless the total combined square footage of the single space exceeds 6,000 sq. ft., or the installation of an automatic sprinkler system is required elsewhere in the Fire Code or Building Code. For the purposes of this provision, fire walls and/or fire barriers shall not define separate buildings or fire areas.

**903.2.11.12 Single and Two Family Dwellings.** An automatic sprinkler system shall be installed in all single and two family dwellings exceeding 6,000 sq. ft. For the purpose of this provision, fire walls and/or fire barriers shall not define separate dwellings.

**903.2.11.13 Townhouses.** An automatic sprinkler system shall be installed in all townhouses consisting of three or more attached units. For the purpose of this provision, fire walls shall not define separate units.

*****Section 903.3.1.1.1; change 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 *... {text unchanged}…* 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.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, where approved by the 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 hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.
5. {Delete.}


******Section 903.3.1.2; change to read as follows:***

**903.3.1.2 NFPA 13R sprinkler systems.** Automatic sprinkler systems in Group R occupancies shall be permitted to be installed throughout in accordance with NFPA 13R where the Group R occupancy meets all of the following conditions:

1. Four stories or less above grade plane.
2. The floor level of the highest story is 35 feet (10668 mm) or less above the lowest level of fire department vehicle access.
3. The floor level of the lowest story is 35 feet (10668 mm) or less below the lowest level of fire department vehicle access.

{No change to remainder of section.}

******Section 903.3.1.2.2; change to read as follows:***

**903.3.1.2.2 Corridors and balconies** Sprinkler protection shall be provided in corridors and for all balconies. *{Delete the rest of this section.}*

*****Section 903.3.1.2.3; delete section and replace as follows:***

**Section 903.3.1.2.3 Attached Garages and Attics.** Sprinkler protection is required in attached garages, and in the following attic spaces:

1. Attics that are used or intended for living purposes or storage shall be protected by an automatic sprinkler system.
2. Where fuel-fired equipment is installed in an unsprinklered attic, not fewer than one quick-response intermediate temperature sprinkler shall be installed above the equipment.
3. Attic spaces of buildings that are two or more stories in height above grade plane or above the lowest level of fire department vehicle access.
4. Group R-4, Condition 2 occupancy attics not required by Item 1 or 3 to have sprinklers shall comply with one of the following:
    - 4.1. Provide automatic sprinkler system protection.
    - 4.2. Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.
    - 4.3. Construct the attic using noncombustible materials.
    - 4.4. Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the International Building Code.
    - 4.5. Fill the attic with noncombustible insulation.

*****Section 903.3.1.3; change to read as follows:***

**903.3.1.3 NFPA 13D Sprinkler Systems.** *Automatic sprinkler systems* installed in one- and two-family *dwellings*, Group R-3 and R-4 congregate living facilities and *townhouses* shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law

***Section 903.3.1.4; add to read as follows:***

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

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

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

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

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

***Section 903.4; add a second paragraph after the exceptions to read as follows:***

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.

***Section 903.3.5; add a second paragraph to read as follows:***

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

***Section 903.4; add a second paragraph after the Exceptions to read as follows:***

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.

***Section 903.4.2; add second paragraph to read as follows:***

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.

***Section 903.4.2; add second paragraph to read as follows:***

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.

***Section 905.2; change to read as follows:***

**905.2 Installation standard.** Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low alarm.

***Section 905.3; change to read as follows:***

**905.3 Required Installations.** Class I standpipe systems shall be installed throughout all buildings with an automatic sprinkler system unless omission is approved by the fire code official. Standpipe systems shall be installed where all interior portions of the building are reachable from the hose connection by a 30 foot hose stream from a nozzle attached to 100 feet of hose. All hose connection locations shall be approved by the fire code official. Standpipe systems may be allowed to be combined with automatic sprinkler systems when approved by the fire code official.

**Exception:** Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14.

*****Section 905.3.9; add to read as follows:***

**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 (60960 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, semi-automatic dry, and manual dry standpipes are allowed as provided for in NFPA 14 where approved by the fire code official.
2. R-2 occupancies of four stories or less in height having no interior corridors.

*****Section 905.4; change Items 1, 3, and 5, 6, and 7 to read as follows:***

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.
   **Exception:** {No change.}
2. {No change.}
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 {remainder of text unchanged}

4. {No change.}
5. Where the roof has a slope less than 4 units vertical in 12 units 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. Standpipe connections shall be placed throughout the structure to meet the reach requirements as outlined in 905.3.
7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure or as otherwise approved by the fire code official.

******Section 905.8; change to read as follows:***

**905.8 Dry standpipes.** Dry standpipes shall not be installed.

**Exception:** Where subject to freezing and in accordance with NFPA 14. Additionally, manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low Supervisory alarm.

*****Section 905.9; add a second paragraph after the exceptions to read as follows:***

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.

******Section 906.1(1); delete Exception 3 as follows:***

*****Section 907.1.4; add to read as follows:***

**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.

**Exception:** Existing systems need not comply unless the total building remodel or expansion initiated after the effective date of this code, as adopted, exceeds 30% of the building. When cumulative building remodel or expansion exceeds 50% of the building must comply within 18 months of permit application.

***Section 907.2.1; change to read as follows:**

**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 300 or more, or where the occupant load is 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.

**Exception:** {No change.}

Activation of fire alarm notification appliances shall:

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

***Section 907.2.3; change to read as follows:**

**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 alarm 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. {No change.}
   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.)

****Section 907.2.10; change to read as follows:**

**907.2.10 Group S.** A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group S public- and self-storage occupancies for interior corridors and interior common areas. Visible notification appliances are not required within storage units.

Exception: {No change.}

***Section 907.2.13, Exception #3; change to read as follows:**

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.

***Section 907.4.2.7; add to read as follows:**

**907.4.2.7 Type.** Manual alarm initiating devices shall be an approved double action type.

***Section 907.6.1.1; add to read as follows:**

**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 a signaling line circuit interface device may be wired Class B, provided the distance from the interface device to the initiating device is ten feet or less.

***Section 907.6.3; delete all four Exceptions.**

***Section 907.6.6; add Section 907.6.6.3 to read as follows:**

**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

***Section 910.2; change Exceptions #2 and 3 to read as follows:**

2. Only manual smoke and heat removal shall 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 $50(m*S)^{1/2}$ or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

***Section 910.2.3; add to read as follows:**

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

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 $m^2$) 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.

***910.3.4.1 Sprinklered 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.

***910.3.4.2 Nonsprinklered 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.

*****Section 910.4.3.1; change to read as follows:***

**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.

*****Section 912.2.3; add to read as follows:***

**912.2.3 Hydrant Distance.** An approved fire hydrant shall be located within 50 feet of the fire department connection as the fire hose lays along an unobstructed path.

*****Section 913.2.1; add second paragraph and exception to read as follows:***

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.

***Section 914.3.1.2; change to read as follows:**

**914.3.1.2 Water Supply to required Fire Pumps.** In all buildings that are more than 120 feet (36.6 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:** {No change to exception.}

****Section 1006.2.1; change Exception #3 to read as follows:**

**1006.2.1 Egress based on occupant load and common path of egress travel distance.** Two exits or exit doorways from any space shall be provided where the design occupant load or the common path of egress travel distance exceeds the values listed in Table 1006.2.1. The cumulative occupant load from adjacent rooms, areas or space shall be determined in accordance with Section 1004.2.

**Exceptions:**

1. {No change.}
2. {No change.}
3. Unoccupied rooftop mechanical rooms and penthouses are not required to comply with the common path of egress travel distance measurement.

***Section 1009.8; add Exception #7 to read as follows:**

**Exceptions:**

1. through 6. {No change.}
7. Buildings regulated under State Law and built in accordance with State registered plans, including variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009 and Chapter 11.

****Section 1010.2.5; change Exceptions #3 and 4 to read as follows:**

**Exceptions:**

1. {No change.}
2. {No change.}
3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, M or S occupancy. (remainder unchanged)
4. Where a pair of doors serves a Group A, B, F, M or S occupancy (remainder unchanged)
5. {No change.}

***Section 1020.2; add Exception #6 to read as follows:**

**Exceptions:**

1. through 5. {No change.}
6. In unsprinklered group B occupancies, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector must activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors must be connected to an approved automatic fire alarm system where such system is provided.

****Section 1030.1.1.1; add Exception#4 to read as follows:**

**Exceptions:**

1. through 3. {No change.}
4. Where alternate means or methods are submitted to and approved by the Building and Fire Officials.

***Section 1032.2; change to read as follows:**

**1032.2 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.

***Section 1103.3; add sentence to end of paragraph as follows:**

Provide emergency signage as required by Section 604.4.

***Section 1103.5.1; add sentence to read as follows:**

Fire sprinkler system installation shall be completed within 24 months from date of notification by the fire code official.

***Section 1103.5.6; add to read as follows:**

**1103.5.6 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.

****Section 1103.7.7; add to read as follows:**

**1103.7.7 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.

**1103.7.7.1 Communication requirements.** Refer to Section 907.6.6 for applicable requirements.

******Section 1203; change and add to read as follows:***

**1203.1.1** {No change.}
**1203.1.2** {No change.}
**1203.1.3 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.
**1203.1.4 {No change.}**
**1203.1.5 Load Duration**. Emergency power systems and standby power systems shall be designed to provide the required power for a minimum duration of 2 hours without being refueled or recharged, unless specified otherwise in this code.

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

**1203.1.6 through 1203.1.9 {**No changes to these sections.}
**1203.1.10 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.
**1203.2 Where Required.** Emergency and standby power systems shall be provided where required by Sections 1203.2.1 through 1203.2.~~18~~26 or elsewhere identified in this code or any other referenced code.
**1203.2.1 through 1203.2.3 {**No change.}
**1203.2.4 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.

Covered and Open Malls, Section 907.2.20 and 914.2
Group A Occupancies, Sections 907.2.1 and 907.5.2.2
Special Amusement Areas, Section 907.2.12 and 914.7
High-rise Buildings, Section 907.2.13 and 914.3
Atriums, Section 907.2.14 and 914.4
Deep Underground Buildings, Section 907.2.19 and 914.5

**1203.2.5 through 1203.2.14 {**No change.}
**1203.2.15 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)

**1203.2.16 Membrane Structures.** Emergency power shall be provided for *exit* signs in temporary tents and membrane structures in accordance with Section 3103.12.6. (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.
**1203.2.17 {**No change.}
**1203.2.18 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:

Covered Mall Building, *International Building Code*, Section 402.7
Atriums, *International Building Code*, Section 404.7
Underground Buildings, *International Building Code*, Section 405.8
Group I-3, *International Building Code*, Section 408.4.2
Stages, *International Building Code*, Section 410
Special Amusement Areas (as applicable to Group A's), *International Building Code*, Section 411
Smoke Protected Seating, Section 1030.6.2

**1203.2.19 {**No change.}
**1203.2.20 Covered and Open Mall Buildings.** Emergency power shall be provided in accordance with Section 907.2.20 and 914.2.
**1203.2.21 Airport Traffic Control Towers.** A standby power system shall be provided in airport traffic control towers more than 65 ft. in height. Power shall be provided to the following equipment:

1. Pressurization equipment, mechanical equipment and lighting.
2. Elevator operating equipment.
3. Fire alarm and smoke detection systems.

**1203.2.22 Smokeproof Enclosures and Stair Pressurization Alternative.** Standby power shall be provided for smokeproof enclosures, stair pressurization alternative and associated automatic fire detection systems as required by the *International Building Code*, Section 909.20.7.2.
**1203.2.23 Elevator Pressurization.** Standby power shall be provided for elevator pressurization system as required by the *International Building Code*, Section 909.21.5.
**1203.2.24 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.
**1203.2.25 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 504.11, Item 7.
**1203.2.26 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.)
**1203.3 through 1203.6 {**No change.}

*****Section 2304.1; change to read as follows:***

**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.

***Section 2401.2; delete this section in its entirety.***

***Section 3103.3.1; delete this section in its entirety***

***Table 3206.2, footnote h; change text to read as follows:***

h. 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.

***Table 3206.2; add footnote j to row titled 'High Hazard' and 'Greater than 300,000' to read as follows:***

j. High hazard high-piled storage areas shall not exceed 500,000 square feet. A 2-hour fire wall constructed in accordance with Section 706 of the *International Building Code* shall be used to divide high-piled storage exceeding 500,000 square feet in area.

****Section 3311.1; change to read as follows:***

**Section 3311.1 Required access.** Approved vehicle access for firefighting and emergency response shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 50 feet (15 240 mm) of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting 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, access shall be approved prior to the time which construction has progressed beyond completion of the foundation of any structure. Whenever the connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an *approved* sign.

***Section 5001.1; change to read as follows:***

**5001.1 Scope.** Prevention, control, and mitigation of dangerous conditions related to storage, dispensing, use and handling of hazardous materials shall be in accordance with this chapter, shall require approval of the fire code official and storage shall be prohibited or limited in the following established boundaries:

*From a point located at the intersection of South Saginaw Boulevard and Longhorn Road, west to the intersection with Old Decatur Road; then north along Old Decatur Road to the north Saginaw city limit boundary; then east along the north Saginaw city limit boundary to the intersection with North Saginaw Boulevard; then south along Saginaw Boulevard ton the intersection with Longhorn Road. This area shall be designated "**District 1**".*

*From a point on East McLeroy Boulevard where it intersects with the Sante Fe – Burlington Northern railroad track (300 block of East McLeroy Boulevard), north along said railroad track to the north Saginaw city limit boundary; then east to its intersection with North Blue Mound Road (F. M. Hwy 156); then south along Blue Mound Road to the intersection with East McLeroy Boulevard; then west along East McLeroy Boulevard to where it intersects with the Sante Fe – Burlington Northern railroad track. This area shall be designated as "**District 2**".*

***Remainder of section unchanged.***

***Add exception 12 to read as follows:***

**Exceptions:**

*1through 11 remain unchanged*

12. The storage and sale of compressed gases in a cylinder exchange program limited to Acetylene, Oxygen, Shielding Gas, Argon, Carbon Dioxide, Nitrogen, and Helium and specifically utilized for the heating, cutting, welding and brazing of metals in the areas zoned as "Community Commercial" and designated as "District 1" in accordance with this chapter, chapter 30 and all other applicable chapters. Total quantity of cylinders, full or empty shall not exceed 45 and maximum cylinder size shall not exceed 250 cubic feet. Permits shall be required as set forth by this code.

***Section 5003.3; change to read as follows:***

**5003.3 Release of Hazardous Materials.** No person/s or entity shall accidentally, negligently, or intentionally release or cause to be released hazardous materials in any quantity into a sewer, storm drain, ditch, drainage canal, creek, stream, river, lake, or tidal waterway or on the ground, driveway, sidewalk, street, highway or into the atmosphere. This includes but is not limited to public and private properties.

***Exceptions remain unchanged.***

***Section 5003.3.1; change to read as follows:***

**5003.3.1 Unauthorized discharges.** When an unauthorized release of hazardous materials has occurred the fire department shall be notified immediately. When applicable or required by fire department personnel the following procedures shall be performed in accordance with Sections 2703.3.1.1 through 2703.3.1.4.

**5003.1.1.1 Records.** Accurate records shall be kept of the unauthorized discharge of the hazardous materials by the person/s, firm or corporation responsible for the unauthorized discharge.

**5003.1.2 Preparation.** Provisions shall be made for controlling and mitigating unauthorized discharges.

**5003.3.1.3 Control.** When an unauthorized discharge caused by primary container failure is discovered, the involved primary container shall be repaired or removed from service at the satisfaction of the fire department.

**5003.3.1.4 Responsibility for cleanup.** The person/s, firm or corporation responsible for the unauthorized discharge shall institute and complete all actions necessary to remedy the effects of such unauthorized discharge to the satisfaction of the fire department and shall be liable for payment of all costs incurred by the fire department and other departments or agencies which assist it to abate such an event. In the event the responsible party cannot be located or identified, the person/s, firm or corporation who has care, custody or control of the property upon which the unauthorized release has occurred will be responsible for the cost of the cleanup. When deemed necessary by fire department personnel, cleanup may be initiated by the fire department or by an authorized individual or firm. Cost associated with such cleanup shall be borne by the owner, operator or other person/s responsible for the unauthorized discharge.

For the purposes of this section, cost incurred by the fire department or other departments of the city shall include but shall not be limited to all actual out-of-pocket expenses attributed to the abatement or cleanup of any hazardous materials incident, including cost of equipment operations, cost of materials utilized (including specialized extinguishing agents and chemicals), cost of specialist, experts or other contract labor not in the full-time employment of the city, overtime costs and any other incidental costs incurred by the city as a result of said incident.

*****Section 5601.1.3; change to read as follows:***

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

*****Section 5703.6;*** *add sentence to end of paragraph to read as follows**:***

An *approved* method of secondary containment shall be provided for underground tank and piping systems.

*****Section 5704.2.11.4; change to read as follows:***

**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.

*****Section 5704.2.11.4.2; change to read as follows:***

**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.

***Section 5704.2.11.4.3; add to read as follows:***

**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.

***Section 5704.2.9.5; change Section 5704.2.9.5 and add Section 5704.2.9.5.3 to read as follows:***

**5704.2.9.5 Above-ground tanks inside of buildings**. Above-ground tanks inside of buildings shall comply with Section 5704.2.9.5.1 through 5704.2.9.5.3.
**5704.2.9.5.1** {No change.}
**5704.2.9.5.2** {No change.}
**5704.2.9.5.3 Combustible liquid storage tanks inside of buildings.** The maximum aggregate allowable quantity limit shall be 3,000 gallons (11 356 L) 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 (11 356 L) quantity shall be stored in protected above-ground tanks;

2. The 3,000 gallon (11 356 L) 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.

***Section 5704.2.9.6.1; change to read as follows:***

**5704.2.9.6.1 Locations where above-ground tanks are prohibited.** Storage of Class I, II, and III liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of **Districts "1" and "2"** in which such storage is prohibited.

*From a point located at the intersection of South Saginaw Boulevard and Longhorn Road, west to the intersection with Old Decatur Road; then north along Old Decatur Road to the north Saginaw city limit boundary; then east along the north Saginaw city limit boundary to the intersection with North Saginaw Boulevard; then south along Saginaw Boulevard to the intersection with Longhorn Road. This area shall be designated "**District 1**".*

*From a point on East McLeroy Boulevard where it intersects with the Sante Fe – Burlington Northern railroad track (300 block of East McLeroy Boulevard), north along said railroad track to the north Saginaw city limit boundary; then east to its intersection with North Blue Mound Road (F. M. Hwy 156); then south along Blue Mound Road to the intersection with East McLeroy Boulevard; then west along East McLeroy Boulevard to where it intersects with the Sante Fe – Burlington Northern railroad track. This area shall be designated as "**District 2**".*

***Section 5707.4; add paragraph to read as follows:**

Mobile fueling sites shall be restricted to commercial, industrial, governmental, or manufacturing, where the parking area having such operations is primarily intended for employee vehicles. Mobile fueling shall be conducted for fleet fueling or employee vehicles only, not the general public. Commercial sites shall be restricted to office-type or similar occupancies that are not primarily intended for use by the public.

***Section 5704.2.11.4; add Section 5704.2.11.4.3 to read as follows:**

**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.

***Section 6103.2.1.8; add to read as follows:**

**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.

***Section 6104.2; add Exception 2. to read as follows:**

**Exceptions:**

1. *{existing text unchanged}*

2. Except as permitted in Sections 308 and 6104.3.3, LP-gas containers are not permitted in residential areas.

***Section 6104.3.3; add to read as follows:***

**6104.3.3 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 gallon above ground or 1,000 gallon underground approved containers.

***Section 6107.4 and 6109.13; change to read as follows:***

**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.

**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.

***{Appendix B Fire-Flow Requirements For Buildings amendments}***

***Table B105.2; change footnote a. to read as follows:***

a. The reduced fire-flow shall be not less than 1,500 gallons per minute.

****{Appendix D Fire Apparatus Access Roads amendments}***

**D102.1 Delete**

***Section D103.4; change to read as follows:***

**D103.4 Dead ends.** Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4.

**TABLE D103.4**
**REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS**

| LENGTH (feet) | WIDTH (feet) | TURNAROUNDS REQUIRED |
|---|---|---|
| 0–150 | 24 | None required |
| 151–500 | 24 | 120-foot Hammerhead, 60-foot “Y” or 96-foot diameter cul-de-sac in accordance with Figure D103.1 |
| 501–750 | 26 | 120-foot Hammerhead, 60-foot “Y” or 96-foot diameter cul-de-sac in accordance with Figure D103.1 |
| Over 750 | Special approval required | |

For SI: 1 foot = 304.8 mm.

***Section D103.5; change Item 1 to read as follows:***

**D103.5 Fire apparatus access road gates.** Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. Where a single gate is provided, the gate width shall be not less than 24 feet (7315.2 mm). Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet (3658 mm).

***Section D103.6; change to read as follows:***

**D103.6 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 "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

**(2) Signs** – Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high (See Figure D103.6). Signs shall have red letters on a white reflective background, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

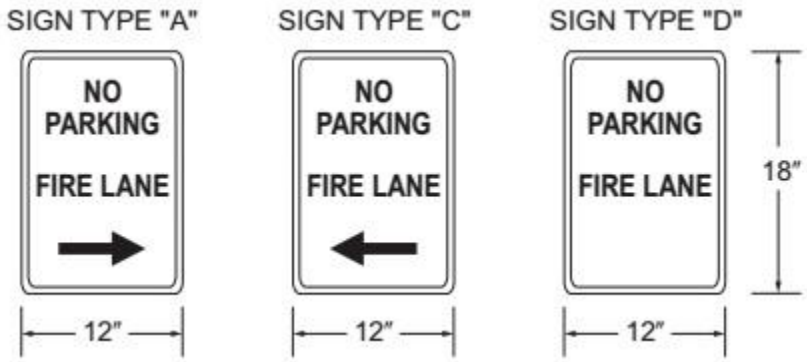


**FIGURE D103.6**
**FIRE LANE SIGNS**

***Section D103.6.1 and D103.6.2; delete sections as follows:***

***Section D104.3; change to read as follows:***

**D104.3 Remoteness.** Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses, or as *approved* by the *fire code official.*

***Section D105.3; change to read as follows:***

**D105.3 Proximity to building.** Unless otherwise approved by the fire code official, one or more of the required access routes meeting this condition shall be located not less than 15 feet (4572 mm) and not greater than 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be *approved* by the *fire code official*.

***Section D106.3; change to read as follows:***

**D106.3 Remoteness.** Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses, or as *approved* by the *fire code official*.

***Section D107.2; change to read as follows:***

**D107.2 Remoteness.** Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses, or as *approved* by the *fire code official*.

***{Appendix L Requirements For Fire Fighter Air Replenishment Systems amendments}***

***Section L101.1; change to read as follows:***

**Section L101.1 Scope.** Fire fighter air replenishment systems (FARS) shall be provided in accordance with this appendix in new buildings when any of the following conditions occur:

1. Any new building 5 or more stories in height.
2. Any new building with 2 or more floors below grade.
3. Any new building 500,000 square feet or more in size.

Each stairwell shall have a supply riser. SCBA fill panels shall be located on odd numbered floors commencing at the first level in the primary stairwell and on even numbered floors commencing at level 2 in the remaining stairwells. Fill panels in buildings over 500,000 square feet shall be located adjacent to each standpipe connection.

***Section L104.13.1; delete this section in its entirety.***

***Section L104.14; add paragraph to read as follows:***

The external mobile air connection shall be located with approved separation from the Fire Department Connection (FDC) to allow functionality of both devices by first responders; shall be visible from and within 50 ft. of a fire apparatus access road along an unobstructed path; and shall be located in an approved signed, secured cabinet.