

ORDINANCE NO. _____

An ordinance amending Chapter 16, “Dallas Fire Code,” of the Dallas City Code, as amended; adopting with certain changes the 2021 Edition of the International Fire Code of the International Code Council, Inc.; regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling, and use of hazardous substances, materials, and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises, and providing for the issuance of permits for hazardous uses or operations; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Chapter 16, “Dallas Fire Code,” of the Dallas City Code, as amended, is amended by adopting the 2021 Edition of the International Fire Code of the International Code Council, Inc. (which is attached as Exhibit A and made a part of this ordinance), with the following amendments:

1. Subsection [A] 101.1, “Title,” of Section 101, “Scope and General Requirements,” of Part 1, “General Provisions,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] 101.1 Title. These regulations shall be known as the *Dallas Fire Code* [~~of [NAME OF JURISDICTION]~~], hereinafter referred to as ‘this code.’”

2. Section 101, “Scope and General Requirements,” of Part 1, “General Provisions,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended by adding a new Subsection 101.6, “Exceptions,” to read as follows:

“101.6 Exceptions. For purposes of this code, the term ‘exception,’ shall be defined and used for criminal prosecution and enforcement as a defense to prosecution.”

3. Subsection [A] 102.1, “Construction and Design Provisions,” of Section 102, “Applicability,” of Part 1, “General Provisions,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] 102.1 Construction and design provisions. The construction and design provisions of this code shall apply to:

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

4. Subsection [A] 102.4, “Application of Building Code,” of Section 102, “Applicability,” of Part 1, “General Provisions,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] 102.4 Application of other [building] codes. The design and construction of new structures shall comply with this code and other codes as applicable [the ~~International Building Code~~], and any *alterations*, additions, changes in use or changes in structures required by this code, which are within the scope of the Dallas [International] Building Code, shall be made in accordance therewith.”

5. Subsection [A] 102.7, “Referenced Codes and Standards,” of Section 102, “Applicability,” of Part 1, “General Provisions,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] 102.7 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 80, and such codes and standards, when specifically adopted, shall be considered to be a part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2. Whenever amendments have been adopted to the referenced codes and standards, each reference to the codes and standards shall be considered to reference the amendments as well. Any reference to NFPA 70 or to the ICC *Electrical Code* means the *Dallas Electrical Code* as adopted.

References made to the *International Mechanical Code*, the *International Building Code*, the *International Plumbing Code*, the *International Energy Conservation Code*, the *International Fuel Gas Code*, the *International Existing Building Code*, the *International Residential Code*, the *International Green Construction Code*, and the *International Swimming Pool and Spa Code*, respectively mean the *Dallas Mechanical Code*, the *Dallas Building Code*, the *Dallas Plumbing Code*, the *Dallas Energy Conservation Code*, the *Dallas Fuel Gas Code*, the *Dallas Existing Building Code*, the *Dallas One- and Two-Family Residential Code*, and the *Dallas Green Construction Code*, and the *Dallas Swimming Pool and Spa Code*, as amended.

[A] 102.7.1 Conflicts. Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

[A] 102.7.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.”

6. Section 103, “Code Compliance Agency,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is retitled as Section 103, “Division of Fire Prevention.”

7. Subsection [A] 103.1, “Creation of Agency,” of Section 103, “Division of Fire Prevention,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“**[A] 103.1 Creation of agency.** The fire prevention division ~~[INSERT NAME OF DEPARTMENT]~~ is established within the jurisdiction under the direction of ~~[hereby created and the official in charge thereof shall be known as the]~~ the *fire chief* ~~[code official]~~. The function of the division ~~[agency]~~ shall be the implementation, administration and enforcement of the provisions of this code.”

8. Subsection [A] 103.2, “Appointment,” of Section 103, “Division of Fire Prevention,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] 103.2 Appointment of the fire marshal. The *fire chief* is authorized to designate a member of the fire department to exercise the powers and perform the duties of fire marshal (*fire code official*) as set forth in this code. The *fire marshal* shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.~~[code official shall be appointed by the chief appointing authority of the jurisdiction]~~”

9. Section 103, “Division of Fire Prevention,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended by adding a new Subsection 103.4, “Fire Prevention Division Personnel and Police,” to read as follows:

“103.4 Fire prevention division personnel and police. The *fire code official* and members of the fire prevention division have the powers of a police officer in performing their duties under this code. When requested to do so by the fire chief, the chief of police is authorized to assign available police officers as necessary to assist the fire department in enforcing the provisions of this code.”

10. Subsection [A] 104.1, “General,” of Section 104, “Duties and Powers of the Fire Code Official,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] 104.1 General. The *fire code official* is hereby authorized to enforce the provisions of this code. The *fire code official* shall have the authority to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures, rules and regulations shall be in compliance with the intent and purpose of this code. Such policies, procedures, rules and regulations shall not have the effect of waiving requirements specifically provided for in this code. Under the fire chief/fire code official direction, the fire department is authorized to enforce all state laws, city ordinances, and executive orders of the jurisdiction.

104.1.1 Stopping uses, evacuation. The *fire code official* is authorized to order an operation or use stopped or the evacuation of any premises, building or portion thereof which does not have a valid certificate of occupancy in accordance with Section 115.”

11. Paragraph [A] 104.6.1, “Approvals,” of Subsection 104.6, “Official Records,” of Section 104, “Duties and Powers of the Fire Code Official,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] 104.6.1 Approvals. A record of approvals and equivalent or alternative methods granted shall be maintained by the *fire code official* and shall be available for public inspection during business hours in accordance with applicable laws.”

12. Subsection 104.11, “Fire Investigations,” of Section 104, “Duties and Powers of the Fire Code Official,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“104.11 Fire investigations. ~~The [*fire code official*, the] fire department is authorized [or other responsible authority shall have the authority] to investigate the cause, origin and circumstances of any fire occurring in the jurisdiction involving loss of life, injury to a person, or destruction or damage to property [explosion or other hazardous condition]. Information that could be related to trade secrets or processes shall not be made part of the public record except as directed by a court of law.~~

104.11.1 Assistance from other agencies. Police and other enforcement agencies shall have authority to render necessary assistance in the investigation of fires when requested to do so.

104.11.2 Procedure. The following procedures apply to fire investigations:

104.11.2.1 Written report. The *fire code official* shall make a written report of the facts developed by the investigation, including the cause, origin and circumstances of the fire; the extent of property damage or personal injury; the amount of fire insurance carried on the property; the name and address of the carrier; and any other information relevant to the fire.

104.11.2.2 Insurance information. At the request of the *fire code official*, the carrier or its agent shall immediately furnish information regarding the amount of fire insurance carried on the property, the carrier’s name and address and any other information relevant to the fire.

104.2.11.2.3 Inspections. The *fire code official* may enter and inspect any building or premises where a fire has occurred, or which has been jeopardized by an adjoining fire. The inspection shall be conducted in a reasonable manner as soon after the occurrence

of the fire as possible. No person may refuse admittance to the fire chief if the fire chief is identified by a uniform or through exhibition of credentials.

104.11.2.4 Hearings. The *fire code official* may conduct public or private hearings to aid in an investigation. Hearing process may be served by an officer designated by the fire chief. The fire chief may summon witnesses, require production of written documents, administer oaths and affirmations to witnesses, take or cause to be taken the sworn testimony of witnesses, and prohibit witnesses from communicating with one another until they have been examined. No person summoned may refuse to appear, to produce written documents, or to be sworn.

104.11.2.5 Prosecution. After investigation, if the *fire code official* believes there is sufficient evidence to charge a person with a crime committed in connection with the fire, the fire chief shall arrest or cause the person to be arrested and charged. The fire chief shall furnish to the prosecuting attorney all available evidence, including the names of witnesses and a transcript of testimony taken at the hearing.”

13. Paragraph [A] 105.1.6, “Annual Permit,” of Subsection [A] 105.1, “General,” of Section 105, “Permits,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is deleted.

14. Paragraph [A] 105.2.2, “Inspection Authorized,” of Subsection [A] 105.2, “Application,” of Section 105, “Permits,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] **105.2.2 Inspection authorized.** Before a new operational permit is *approved*, the *fire code official* is authorized to and shall inspect the receptacles, vehicles, buildings, devices, limited access gates, premises, storage spaces or areas to be used to determine compliance with this code or any operational constraints required.”

15. Paragraph [A] 105.2.3, “Time Limitation of Application,” of Subsection [A] 105.2, “Application,” of Section 105, “Permits,” of Part 2, “Administrative Provisions,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is deleted.

16. Subsection [A] 105.3, “Conditions of a Permit,” of Section 105, “Permits,” of Part 2, “Administrative Provisions,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] 105.3 Conditions of a permit. A permit shall constitute permission to maintain, store or handle materials; or to conduct processes that produce conditions hazardous to life or property [~~; or to install equipment utilized in connection with such activities; or to install or modify any fire protection system or equipment or any other construction, equipment installation or modification~~] in accordance with the provisions of this code where a permit is required by Section 105.5 or 105.6. Such permission shall not be construed as authority to violate, cancel or set aside any of the provisions of this code or other applicable regulations or laws of the jurisdiction.

[A] 105.3.1 Expiration. An operational permit shall remain in effect until reissued, renewed, or revoked, or for such a period of time as specified in the permit. [~~Construction permits shall automatically become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Before such work recommences, a new permit shall be first obtained and the fee to recommence work, if any, shall be one half the amount required for a new permit for such work, provided that changes have not been made or will not be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year.~~] Permits are not transferable and any change in occupancy, operation, tenancy or ownership shall require that a new permit be issued. The fire code official is authorized to make adjustments to the terms and conditions of any permit or agreement issued based on facts of the case.

~~**[A] 105.3.2 Extensions.** A permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit where work is unable to be commenced within the time required by this section for good and satisfactory reasons. The fire code official is authorized to grant, in writing, one or more extensions of the time period of a permit for periods of not more than 180 days each. Such extensions shall be requested by the permit holder in writing and justifiable cause demonstrated.]~~

[A] 105.3.3 Occupancy prohibited before approval. The building or structure shall not be occupied prior to the *fire code official* issuing a permit and conducting associated inspections indicating the applicable provisions of this code have been met.

[A] 105.3.4 Conditional permits. Where permits are required and on the request of a permit applicant, the *fire code official* is authorized to issue a conditional permit to occupy the premises or portion thereof before the entire work or operations on the premises is completed, provided that such portion or portions will be occupied safely prior to full completion or

installation of equipment and operations without endangering life or public welfare. The *fire code official* shall notify the permit applicant in writing of any limitations or restrictions necessary to keep the permit the area safe. The holder of a conditional permit shall proceed only to the point for which approval has been given, at the permit holder's own risk and without assurance that approval for the occupancy or the utilization of the entire premises, equipment or operations will be granted.

[A] 105.3.5 Posting the permit. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the *fire code official*.

[A] 105.3.6 Compliance with code. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on *construction documents* and other data shall not prevent the *fire code official* from requiring the correction of errors in the *construction documents* and other data. Any addition to or alteration of *approved construction documents* shall be *approved* in advance by the *fire code official*, as evidenced by the issuance of a new or amended permit.

[A] 105.3.7 Information on the permit. The *fire code official* shall issue all permits required by this code on an *approved* form furnished for that purpose. Ther permit shall contain a general description of the operation or occupancy and its location and any other information required by the *fire code official*. Issued permits shall bear the signature of the *fire code official* or other *approved* legal authorization.

[A] 105.3.8 Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on *construction documents*, operational documents and other data shall not prevent the *fire code official* from requiring correction of errors in the documents or other data.

17. Subsection 105.5, "Required Operational Permits," of Section 105, "Permits," of Part 2, "Administration and Enforcement," of Chapter 1, "Scope and Administration," of Part I, "Administrative," of the 2021 International Fire Code is amended to read as follows:

"105.5 Required operational permits. The *fire code official* is authorized to issue operational permits for the operations set forth in Sections 105.5.1[2] through 105.5.57[52]."

105.5.1 Additive manufacturing. An operational permit is required to conduct additive manufacturing operations regulated by Section 320.3.

105.5.2 Aerosol products, aerosol cooking spray products and plastic aerosol 3 products. An operational permit is required to manufacture, store or handle an aggregate quantity of Level 2 or Level 3 aerosol products, aerosol cooking spray products or plastic aerosol 3 products in excess of 500 pounds (227 kg) net weight.

105.5.3 Amusement buildings. An operational permit is required to operate a special amusement building.

105.5.4 Aviation facilities. An operational permit is required to use a Group H or Group S occupancy for aircraft servicing or repair and aircraft fuel-servicing vehicles. Additional permits required by other sections of this code include, but are not limited to, hot work, hazardous materials and flammable or combustible finishes.

105.5.5 Carnivals and fairs. An operational permit is required to conduct a carnival or fair.

105.5.6 Asphalt (tar) kettles. A permit is required for the operation of an asphalt (tar) kettle. A separate permit is required for each location where these activities are being conducted. Additional permits required by other sections of this code include, but are not limited to, hot work and LP-gas. [Cellulose nitrate film. An operational permit is required to store, handle or use cellulose nitrate film in a Group A occupancy.]

105.5.7 Reserved. ~~[Combustible dust-producing operations. An operational permit is required to operate a grain elevator, flour starch mill, feed mill, or a plant pulverizing aluminum, coal, cocoa, magnesium, spices or sugar, or other operations producing combustible dusts as defined in Chapter 2.]~~

105.5.8 Combustible fibers. An operational permit is required for the storage and handling of *combustible fibers* in quantities greater than 100 cubic feet (2.8 m³)

Exception: A permit is not required for agricultural storage.

105.5.9 Compressed gases. An operational permit is required for the storage, use or handling at *normal temperature and pressure* (NTP) of *compressed gases* in excess of the amounts listed in Table 105.5.9.

Exception: Vehicles equipped for and using *compressed gas* as a fuel for propelling the vehicle.

105.5.9.1 Acetylene generator. A permit is required to operate an acetylene generator. Also see Chapter 53.

**TABLE 105.5.9
PERMIT AMOUNTS FOR COMPRESSED GASES**

TYPE OF GAS	AMOUNT (cubic feet at NTP)
Carbon dioxide used in carbon dioxide enrichment systems	875 (100 lbs.)
Carbon dioxide used in insulated liquid carbon dioxide beverage dispensing applications	875 (100 lbs.)
Corrosive	200
Flammable (except cryogenic fluids and liquefied petroleum gases)	200
Highly toxic	Any Amount
Inert and simple asphyxiant	6,000
Oxidizing (including oxygen)	504
Pyrophoric	Any Amount
Toxic	Any Amount

For SI: 1 cubic foot = 0.02832 m³.

105.5.10 [Reserved.] ~~[Covered and open mall buildings.~~ An operational permit is required for:

- ~~1. The placement of retail fixtures and displays, concession equipment, displays of highly combustible goods and similar items in the mall.~~
- ~~2. The display of liquid or gas fired equipment in the mall.~~
- ~~3. The use of open flame or flame-producing equipment in the mall.]~~

105.5.11 Cryogenic fluids. An operational permit is required to produce, store, transport on site, use, handle or dispense *cryogenic fluids* in excess of the amounts listed in Table 105.5.11.

Exception: Permits are not required for vehicles equipped for and using *cryogenic fluids* as a fuel for propelling the vehicle or for refrigerating the lading.

**TABLE 105.5.11
PERMIT AMOUNTS FOR CRYOGENIC FLUIDS**

TYPE OF CRYOGENIC FLUID	INSIDE BUILDING (gallons)	OUTSIDE BUILDING (gallons)
Flammable	More than 1	60
Inert	60	500
Oxidizing (includes oxygen)	10	50
Physical or health hazard not indicated above	Any Amount	Any Amount

For SI: 1 gallon = 3.785 L.

105.5.12 Cutting and welding. An operational permit is required to conduct cutting or welding operations within the jurisdiction.

105.5.13 Dry cleaning. An operational permit is required to engage in the business of dry cleaning or to change to a more hazardous cleaning solvent used in existing dry cleaning equipment.

105.5.14 Energy storage systems. An operational permit is required for stationary and mobile energy storage systems regulated by Section 1207.

105.5.15 Exhibits and trade shows. An operational permit is required to operate exhibits and trade shows.

105.5.16 Explosives. An operational permit is required for the manufacture, transportation, storage, handling, sale or use of any quantity of *explosives*, *explosive materials*, fireworks or pyrotechnic special effects within the scope of Chapter 56.

Exception: Storage in Group R-3 occupancies of smokeless propellant, black powder and small arms primers for personal use, not for resale and in accordance with Section 5606.

105.5.17 Reserved. [Fire hydrants and valves. ~~An operational permit is required to use or operate fire hydrants or valves intended for fire suppression purposes that are installed on water systems and provided with ready access from a fire apparatus access road that is open to or generally used by the public.~~

~~**Exception:** A permit is not required for authorized employees of the water company that supplies the system or the fire department to use or operate fire hydrants or valves.]~~

105.5.18 Flammable and combustible liquids. An operational permit is required:

1. To use or operate a pipeline for the transportation within facilities of *flammable* or *combustible liquids*. This requirement shall not apply to the off-site transportation in pipelines regulated by the Department of Transportation (DOTn) nor does it apply to piping systems.
2. To store, handle or use Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following:
 - 2.1. The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the *fire code official*, would cause an unsafe condition.
 - 2.2. The storage or use of paints, oils, varnishes or similar flammable mixtures where such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days.
3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment.
4. To store, handle or use Class IIIB liquids in tanks or portable tanks for fueling motor vehicles at motor fuel-dispensing facilities or where connected to fuel-burning equipment.

Exception: Fuel oil and used motor oil used for space heating or water heating.

5. To remove Class I or II liquids from an underground storage tank used for fueling motor vehicles by any means other than the *approved*, stationary on-site pumps normally used for dispensing purposes.
6. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where *flammable* and *combustible liquids* are produced, processed, transported, stored, dispensed or used. This includes tanks, lines, monitor wells and other appurtenances of the tank system.
7. To remove, abandon or place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground *flammable* or *combustible liquid* tank. This includes tanks, lines, monitor wells, and other appurtenances of the tank system.

8. To change the type of contents stored in a *flammable* or *combustible liquid* tank to a material that poses a greater hazard than that for which the tank was designed and constructed.
9. To manufacture, process, blend or refine *flammable* or *combustible liquids*.
10. To install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used. ~~[To engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments in accordance with Section 5706.5.4 or to engage in on-demand mobile fueling operations in accordance with Section 5707.]~~
11. To store, handle or use Class III liquids in tanks or portable tanks for fueling motor vehicles and construction equipment at construction sites. ~~[To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles, marine craft and other special equipment at commercial, industrial, governmental or manufacturing establishments in accordance with Section 5706.5.4 or, where required by the fire code official, to utilize a site for on-demand mobile fueling operations in accordance with Section 5707.]”~~

105.5.19 Floor or wall finishing. An operational permit is required for floor or wall finishing or surfacing operations exceeding 350 square feet (33 m²) using Class I or Class II liquids.

105.5.20 Fruit and crop ripening. An operational permit is required to operate a fruit-, or crop-ripening facility or conduct a fruit-ripening process using ethylene gas.

105.5.21 ~~Reserved.~~ ~~Fumigation and insecticidal fogging.~~ ~~An operational permit is required to operate a business of fumigation or insecticidal fogging, and to maintain a room, vault or chamber in which a toxic or flammable fumigant is used.]~~

105.5.22 Hazardous materials. An operational permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the amounts listed in Table 105.5.22.

105.5.23 HPM facilities. An operational permit is required to store, handle or use hazardous production materials.

105.5.24 High-piled storage. An operational permit is required to use a building or portion thereof with more than 500 square feet (46 m²), including aisles, of *high-piled combustible storage*.

105.5.25 Hot work operations. An operational permit is required for hot work including, but not limited to:

1. Public exhibitions and demonstrations where hot work is conducted.
2. Use of portable hot work equipment at construction sites or inside a structure.

~~[Exception: Work that is conducted under a construction permit.]~~

3. Fixed-site hot work equipment, such as welding booths.
4. Hot work conducted within a hazardous fire ~~[wildfire]~~ risk area.
5. Application of roof coverings with the use of an open-flame device.
6. Mobile welding/cutting (hot works) apparatus. A separate permit is required for each mobile W/C (hot work) vehicle. ~~[When approved, the fire code official shall issue a permit to carry out a hot work program. This program allows approved personnel to regulate their facility's hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in Chapter 35. These permits shall be issued only to their employees or hot work operations under their supervision.]~~

6.1 The fire department shall inspect each vehicle to ensure the equipment is in good working order and in compliance with the provisions of Chapter 35 before issuing a permit to operate.

6.2 Regulations will be given to the owner/operator of the apparatus. The responsible person shall sign for these regulations.

6.3 The owner/operator of the apparatus shall ensure compliance with the requirements found in the regulations received.

105.5.26 Industrial ovens. An operational permit is required for operation of industrial ovens regulated by Chapter 30.

105.5.27 Lumber yards and woodworking plants. An operational permit is required for the storage or processing of lumber exceeding 100,000 board feet (8,333 ft³) (236m³).

105.5.28 Liquid or-gas-fueled vehicles or equipment in assembly buildings. An operational permit is required to display, operate or demonstrate liquid-or gas-fueled vehicles or equipment in assembly buildings.

105.5.29 LP-gas. An operational permit is required for:

1. Storage and use of LP-gas where the aggregate capacity of containers is more than 100 gallons (379 L) in water capacity.

~~[Exception: A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less or multiple container systems having an aggregate quantity not exceeding 500 gallons (1893 L), serving occupancies in Group R-3.]~~

2. The use of [Operation of cargo tankers that transport] LP-gas for demonstration or portable cooking equipment. See Chapter 61.

105.5.30 Magnesium. An operational permit is required to melt, cast, heat treat or grind more than 10 pounds (4.54 kg) of magnesium.

105.5.31 Miscellaneous combustible storage. A~~n operational~~ permit is required to store in any building or on any premises in excess of 2,500 cubic feet (71 m³) gross volume of combustible empty packing cases, boxes, barrels or similar containers, combustible pallets, rubber tires, rubber, cork or similar combustible material.

105.5.32 Mobile food preparation vehicles. A permit is required for mobile food preparation vehicles equipped with appliances that produce smoke or grease-laden vapors.

105.5.33 Reserved. ~~[Motor fuel-dispensing facilities. An operational permit is required for the operation of automotive, marine and fleet motor fuel-dispensing facilities.]~~

105.5.34 Open burning. An operational permit is required for the kindling or maintaining of an open fire, recreational fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be complied with.

~~[Exception: Recreational fires.]~~

105.5.34.1 Trench burning. A separate permit is required for each day of trench burning.

105.5.34.2 Air curtain incinerators/pit burners. A separate permit is required to operate an air curtain incinerator/pit burner or similar type device that uses an air curtain to burn waste.

105.5.35 Open flames and torches. An operational permit is required to remove paint with a torch; or to use a torch or open-flame device in a fire ~~[wildfire-risk]~~ area.

105.5.36 Open flames and candles. An operational permit is required to use open flames or candles in connection with assembly areas, dining areas of restaurants or drinking

establishments. This permit includes the use of free-standing LP-gas heaters in assembly occupancies.

105.5.37 ~~Reserved.~~ [~~Organic coatings.~~ An operational permit is required for any organic-coating manufacturing operation producing more than 1 gallon (4 L) of an organic coating in one day.]

105.5.38 Outdoor assembly event. An operational permit is required to conduct an *outdoor assembly event* where planned attendance exceeds 1,000 persons.

Exception: A permit is not required for existing outdoor venues with a valid certificate of occupancy or at the state fair grounds.

105.5.39 ~~Reserved.~~ [~~Places of assembly.~~ An operational permit is required to operate a place of assembly.]

105.5.40 Plant extraction systems. An operational permit is required to use plant extraction systems.

105.5.41 Private fire hydrants and water supplies. An annual [operational] permit is required for the [removal from service,] use or operation of private fire hydrants or alternate water supplies, including but not limited to storage tanks and ponds.

Exception: A permit is not required for private industry with trained maintenance personnel, private fire brigade or fire departments to maintain, test and use private hydrants.]

105.5.42 Pyrotechnic special effects material. An operational permit is required for transportation, use, [and] handling, storage and display of pyrotechnic special effects material. See Chapter 56.

105.5.43 ~~Reserved.~~ [~~Pyroxylin plastics.~~ An operational permit is required for storage or handling of more than 25 pounds (11 kg) of cellulose nitrate (pyroxylin) plastics, and for the assembly or manufacture of articles involving pyroxylin plastics.]

105.5.44 Refrigeration equipment. An operational permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6.

105.5.45 ~~Reserved.~~ [~~Repair garages and motor fuel dispensing facilities.~~ An operational permit is required for operation of repair garages.]

105.5.46 ~~Reserved.~~ [~~Rooftop heliports.~~ An operational permit is required for the operation of a rooftop heliport.]

105.5.47 Spraying or dipping. An operational permit is required to conduct a spraying or dipping operation utilizing *flammable* or *combustible liquids* or the application of combustible powders regulated by Chapter 24.

105.5.48 ~~Reserved.~~[Storage of scrap tires and tire byproducts. ~~An operational permit is required to establish, conduct or maintain storage of scrap tires and tire byproducts that exceeds 2,500 cubic feet (71 m³) of total volume of scrap tires, and for indoor storage of tires and tire byproducts.]~~

105.5.49 Temporary membrane structures,~~[and]~~ tents and canopies. An operational permit is required to operate an air-supported temporary membrane structure, a temporary *special event structure*, or a tent having an area in excess of 399 ~~[400]~~ square feet (37 m²) or a canopy in excess of 399 square feet (37 m²).

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Fabric canopies ~~[Tents]~~ open on all sides, which comply with all of the following:
 - 2.1. Individual canopies ~~[tents]~~ having a maximum size of 700 square feet (65 m²).
 - 2.2. The aggregate area of multiple canopies ~~[tents]~~ placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total.
 - 2.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.
3. Awnings.
4. Tents having an occupant load of less than 10 persons.

105.5.50 Tire-rebuilding plants. An operational permit is required for the operation and maintenance of a tire rebuilding plant.

105.5.51 Waste handling. An operational permit is required for the operation of wrecking yards, junk yards and waste material-handling facilities.

105.5.52 Wood products. An operational permit is required to store chips, hogged material, lumber or plywood in excess of 200 cubic feet (6 m³).

105.5.53 Commercial cooking fire-extinguishing system. A permit is required to install an approved automatic fire-extinguishing system for commercial cooking systems.

105.5.54 Calcium carbide storage. A permit is required to store more than 200 pounds of calcium carbide. See Chapter 50.

105.5.55 Limited access gates. An annual permit is required for the operation of limited access gates which obstruct fire apparatus access roads.

105.5.56 Mobile fueling. A separate permit is required for each mobile refueling apparatus utilized for the purpose of transferring fuel in accordance with this section. A separate permit is required for each site where mobile refueling operations take place in accordance with this section. See Chapter 57.

105.5.57 State licensed facilities. An annual permit is required to operate a childcare facility, adult day care facility, foster home, small-assisted living facility, or a residential care facility as defined by the Texas Department of Aging and Disability Services and the Texas Department of Family and Protective Services.”

30. Subsection 105.6, “Required Construction Permits,” of Section 105, “Permits,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] **105.6 Required construction permits.** The *fire code official* is authorized to issue [construction] permits for work as set forth in Sections 105.6.1 through 105.6.24.

~~[A] 105.6.1 Automatic fire extinguishing systems. A construction permit is required for installation of or modification to an automatic fire extinguishing system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.]~~

[A]105.6.2 **Reserved.** ~~[Compressed gases. Where the compressed gases in use or storage exceed the amounts listed in Table 105.5.9, a construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a compressed gas system.]~~

Exceptions:

- ~~1. Routine maintenance.~~
- ~~2. For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.]~~

[A] 105.6.3 **Reserved.** ~~Cryogenic fluids. A construction permit is required for installation of or alteration to outdoor stationary cryogenic fluid storage systems where the system capacity exceeds the amounts listed in Table 105.5.11. Maintenance performed in accordance with this code is not considered to be an alteration and does not require a construction permit.]~~

[A] **105.6.4 Emergency responder communication coverage system.** A construction permit is required for installation of or modification to in-building, two-way emergency responder communication coverage systems and related equipment. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.

[A] **105.6.5 Reserved. ~~[Energy storage systems.~~** A construction permit is required to install ~~energy storage systems regulated by Section 1207.]~~

[A] **105.6.6 Fire alarm and detection systems and related equipment.** An impaired system ~~[construction]~~ permit is required for installation of or modification to fire alarm and detection systems and related equipment. Construction documents complying with 901.2 along with the written impairment plan shall be submitted to the *fire code official* before work starts. Construction documents complying with 901.2 and the *Dallas Building Code* shall be submitted to the *building official* for permitting and plan review purposes. ~~[Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.]~~

[A] **105.6.7 Reserved. ~~[Fire pumps and related equipment.~~** A construction permit is required for installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers and generators. ~~Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.]~~

[A] **105.6.8 Reserved. ~~[Flammable and combustible liquids.~~** A construction permit is required:

- ~~1. To install, repair or modify a pipeline for the transportation of *flammable or combustible liquids*.~~
- ~~2. To install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells, fuel dispensing stations, refineries, distilleries and similar facilities where *flammable and combustible liquids* are produced, processed, transported, stored, dispensed or used.~~
- ~~3. To install, alter, remove, abandon or otherwise dispose of a *flammable or combustible liquid tank*.~~

[A] **105.6.9 Reserved. ~~[Fuel cell power systems.~~** A construction permit is required to install ~~stationary fuel cell power systems.]~~

[A] **105.6.10 Reserved. ~~[Gas detection systems.~~** A construction permit is required for the installation of or modification to gas detection systems. ~~Maintenance performed in accordance with this code is not considered a modification and shall not require a permit.]~~

[A] 105.6.11 Gates and barricades across fire apparatus access roads. A construction permit is required for the installation of or modification to a gate or barricade across a fire apparatus access road.

[A] 105.6.12 Reserved. ~~[Hazardous materials]~~. A construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service or close or substantially modify a storage facility or other area regulated by Chapter 50 where the hazardous materials in use or storage exceed the amounts listed in Table 105.5.22.

Exceptions:

- ~~1. Routine maintenance.~~
- ~~2. For repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.]~~

[A] 105.6.13 High-piled combustible storage. A construction permit is required for the installation of or modification to a structure with more than 500 square feet (46 m²), including aisles, of *high-piled combustible storage*. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.

[A] 105.6.14 Reserved. ~~[Industrial ovens]~~. A construction permit is required for installation of industrial ovens regulated by Chapter 30.

Exceptions:

- ~~1. Routine maintenance.~~
- ~~2. For repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.]~~

[A] 105.6.15 Reserved. ~~[LP gas]~~. A construction permit is required for installation of or modification to an LP-gas system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.]

[A] 105.6.16 Reserved. ~~[Motor vehicle repair rooms and booths]~~. A construction permit is required to install or modify a motor vehicle repair room or booth. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.]

[A] 105.6. 17 Plant extraction systems. A construction permit is required for installation of or modification to plant extraction systems. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

[A] 105.6.18 Reserved. ~~[Private fire hydrants]~~. A construction permit is required for the installation or modification of private tire hydrants. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.]

[A] **105.6.19 Reserved. [~~Smoke control or smoke exhaust systems.~~** Construction permits are required for installation of or alteration to smoke control or smoke exhaust systems. Maintenance performed in accordance with this code is not considered to be an alteration and does not require a permit.]

[A] **105.6.20 Reserved. [~~Solar photovoltaic power systems.~~** A construction permit is required to install or modify solar photovoltaic power systems. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.]

[A] **105.6.21 Reserved. [~~Special event structure.~~** A single construction permit is required to erect and take down a *temporary special event structure.*]

[A] **105.6.22 Reserved. [~~Spraying or dipping.~~** A construction permit is required to install or modify a spray room, dip tank or booth. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.]

[A] **105.6.23 Reserved. [~~Standpipe systems.~~** A construction permit is required for the installation, modification or removal from service of a standpipe system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.]

[A] **105.6.24 Temporary membrane structures, [and] tents, and canopies.** A construction permit is required to erect an air supported temporary membrane structure, [~~a temporary stage canopy~~] or a tent having an area in excess of 399 [~~400~~] square feet (37 m²).

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Funeral tents and curtains, or extensions attached thereto, when used for funeral services.
3. Tents, fabric canopies, and awnings open on all sides, which comply with all of the following:
 - 3.1. Individual tents shall have a maximum size of 700 square feet (65 m²).
 - 3.2. The aggregate area of multiple canopies [~~tents~~] placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65m²) total.
 - 3.3. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be maintained.

4. Tents having an occupant load of less than 10 persons.

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

31. Subsection [A] 106.1, “Submittals,” of Section 106, “Construction Documents,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“**[A] 106.1 Submittals.** When required by the fire code official, c[€]onstruction documents and supporting data shall be submitted in two or more sets with each application for a permit and in such form and detail as required by the *fire code official*. The *construction documents* shall be prepared by a *registered design professional* where required by the statutes of the jurisdiction in which the project is to be constructed.

Exception: The *fire code official* is authorized to waive the submission of *construction documents* and supporting data not required to be prepared by a *registered design professional* if it is found that the nature of the work applied for is such that review of *construction documents* is not necessary to obtain compliance with this code.”

32. Subsection [A] 107.2, “Schedule of Permit Fees”, of Section 107, “Fees,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“**[A] 107.2 Schedule of permit fees.** Where a permit is required by Section 105, a nonrefundable fee for each permit shall be paid as required, in accordance with the following schedule [~~as established by the applicable governing authority~~].

<u>1.</u>	<u>Acetylene generator, annual</u>	<u>\$112.00</u>
<u>2.</u>	<u>Aerosol products, annual</u>	<u>\$249.00</u>
<u>3.</u>	<u>Air curtain incinerator/pit/trench burn, per day</u>	<u>\$228.30</u>
<u>4.</u>	<u>Amusement building</u>	<u>\$155.00</u>
<u>5.</u>	<u>Asphalt (tar) kettles, annual</u>	<u>\$243.00</u>
<u>6.</u>	<u>Aviation facilities</u>	<u>\$407.00</u>

<u>7.</u>	<u>Calcium carbide storage, annual</u>	<u>\$102.00</u>
<u>8.</u>	<u>Candle and open flames</u>	<u>\$200.00</u>
<u>9.</u>	<u>Carnivals and fairs, daily</u>	<u>\$350.00</u>
<u>10.</u>	<u>Combustible storage (miscellaneous), annual</u>	<u>\$310.00</u>
<u>11.</u>	<u>Commercial cooking fire-extinguishing system</u>	<u>\$209.00</u>
<u>12.</u>	<u>Compressed gas filling/storage/use, annual</u>	<u>\$145.00</u>
<u>13.</u>	<u>Cryogenic fluids, annual</u>	<u>\$401.00</u>
<u>14.</u>	<u>Dry cleaning plant, annual</u>	<u>\$130.00</u>
<u>15.</u>	<u>Explosive /blasting, daily</u>	<u>\$209.00</u>
<u>16.</u>	<u>Fireworks/explosive storage, daily</u>	<u>\$800.00</u>
<u>17.</u>	<u>Fireworks/explosive transportation, daily</u>	<u>\$275.00</u>
<u>18.</u>	<u>Fireworks display (initial)</u>	<u>\$500.00</u>
<u>19.</u>	<u>Fireworks display (subsequent)</u>	<u>\$264.00</u>
<u>20.</u>	<u>Flammable and combustible liquids, annual</u>	<u>\$376.00</u>
<u>21.</u>	<u>Floor/wall finishing</u>	<u>\$179.00</u>
<u>22.</u>	<u>Fruit and crop ripening, annual</u>	<u>\$231.00</u>
<u>23.</u>	<u>Hazardous materials, annual</u>	<u>\$382.00</u>
<u>24.</u>	<u>Hazardous production material (HPM), annual</u>	<u>\$310.00</u>
<u>25.</u>	<u>High pile storage, annual</u>	<u>\$450.00</u>
<u>26.</u>	<u>Industrial oven</u>	<u>\$250.00</u>
<u>27.</u>	<u>Limited access gates</u>	
	<u>(1 to 3 gates)</u>	<u>\$300.00</u>
	<u>(4 to 7 gates)</u>	<u>\$450.00</u>
	<u>(8 or more gates)</u>	<u>\$550.00</u>
<u>28.</u>	<u>Liquid- or gas-fueled vehicles or equipment in assembly buildings, per event:</u>	
	<u>(1 to 10 vehicles or pieces of equipment)</u>	<u>\$234.00</u>
	<u>(11 to 30 vehicles or pieces of equipment)</u>	<u>\$400.00</u>
	<u>(31 or more vehicles or pieces of equipment)</u>	<u>\$550.00</u>
	<u>(over 400 vehicles or pieces of equipment)</u>	<u>\$750.00</u>
<u>29.</u>	<u>LP-gas storage/use</u>	<u>\$305.00</u>

<u>30.</u>	<u>LP-gas demonstration/portable cooking [CART]</u>	<u>\$150.00</u>
<u>31.</u>	<u>LP-gas demonstration/portable cooking [VEHICLE]</u>	<u>\$202.00</u>
<u>32.</u>	<u>Lumber yards and woodworking plants, annual</u>	<u>\$376.00</u>
<u>33.</u>	<u>Magnesium, annual</u>	<u>\$223.00</u>
<u>34.</u>	<u>Mobile fueling</u>	
	<u>(site survey), annual</u>	<u>\$216.00</u>
	<u>(vehicle inspection) annual</u>	<u>\$216.00</u>
<u>35.</u>	<u>Open burning/recreational fires</u>	<u>\$155.00</u>
<u>36.</u>	<u>Plan Review Fees</u>	
	<u>(fire apparatus access roads)</u>	<u>\$350.00</u>
	<u>(limited access gates & barriers)</u>	<u>\$300.00</u>
<u>37.</u>	<u>Private fire hydrant and water supplies, annual</u>	<u>\$443.00</u>
<u>38.</u>	<u>Pyrotechnic special effects material, daily:</u>	
	<u>Initial performance</u>	<u>\$300.00</u>
	<u>Subsequent performances</u>	<u>\$173.00</u>
<u>39.</u>	<u>Refrigeration equipment</u>	<u>\$234.00</u>
<u>40.</u>	<u>Scrap tire storage, annual</u>	<u>\$200.00</u>
<u>41.</u>	<u>Spray painting/dipping</u>	<u>\$350.00</u>
<u>42.</u>	<u>Standby personnel,</u>	
	<u>Hourly</u>	<u>\$110.00</u>
	<u>New Construction re-test</u>	<u>\$622.00</u>
<u>43.</u>	<u>State licensed facilities</u>	
	<u>(child care facility), annual 35 Children or less</u>	<u>\$300.00</u>
	<u>(child care facility), annual 36 Children or more</u>	<u>\$400.00</u>
	<u>(residential care facility, annual</u>	<u>\$350.00</u>
	<u>(foster home five children or fewer), annual</u>	<u>\$50.00</u>
	<u>(small assisted living), annual</u>	<u>\$640.00</u>
	<u>(adult day care facility), annual</u>	<u>\$700.00</u>
<u>44.</u>	<u>Temporary membrane structures and tents,</u>	
	<u>Including plan review (per event)</u>	<u>\$323.00</u>
<u>45.</u>	<u>Tire-rebuilding plan</u>	<u>\$188.00</u>

46.	<u>Torch and open flames</u>	<u>\$273.00</u>
47.	<u>Waste handling, annual</u>	<u>\$288.00</u>
48.	<u>Welding/cutting/hot works</u>	<u>\$400.00</u>

33. Section 107, “Fees,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended by adding a new Subsection [A] 107.7, “Reinspection Fee,” to read as follows:

“[A] **107.7 Reinspection fee.** Whenever a building or premises in the city is inspected by the *fire code official* and a violation of this code is found, the building or premises shall, after the expiration of any time limit for compliance given in a notice or order issued because of the violations, be reinspected by the *fire code official* to determine that the violation has been eliminated. The owner, occupant, operator or other person responsible for the violation shall pay to the city assessor and collector of taxes a fee in accordance with the following schedule for each reinspection that is conducted until the violation is determined to be eliminated.

NUMBER OF REINSPECTIONS	FEE
1 st	\$171
2 nd	\$205
3 rd AND EACH SUBSEQUENT	\$205

Exception: No fee shall be charged for a reinspection of the following:

1. A Group R-3 or R-4 occupancy, as defined in the *Dallas Building Code*.
2. An individual *dwelling unit* within an apartment house or residential condominium complex, as defined in the *Dallas Building Code*, when the violation is the responsibility of the occupant of the *dwelling unit* and not the responsibility of the owner or operator of or the person responsible for the building or premises.
3. Activities directly related to construction conducted on a building or premises, or part of the building or premises, pursuant to a valid building permit issued by the building official, including any reinspection that is required before a certificate of occupancy related to the construction activities may be issued for the building or premises.”

34. Section 111, “Means of Appeals,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

**“SECTION 111
BOARD [MEANS] OF APPEALS**

[A] 111.1 Creation, membership and qualifications. The fire code advisory and appeals board is created to determine the suitability of alternate materials and types of construction and to provide for reasonable interpretations of the provisions of this code. The fire code advisory and appeals board shall consist of the following nine members who are qualified by experience and training to pass judgment upon pertinent matters

1. Two registered engineers, one of which is a fire protection engineer.
2. One registered architect.
3. One building contractor having at least five years’ experience in the construction of commercial buildings.
4. One insurance investigator having at least five years’ experience in the investigation of casualty insurance claims.
5. One person experienced in the practice or technique of handling flammable or combustible liquids.
6. One person experienced in the practice or technique of managing large public assembly functions.
7. Two persons having a record of active participation in community affairs.

111.1.1 Ex-officio members. In addition to the nine board members enumerated in Section [A] 111.1, the building official and fire marshal shall serve as ex-officio members of the board without voting privileges. ~~[Board of appeals established. In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.]~~

[A] 111.2 Limitations on authority. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of the code.

[A] 111.3 Appointment and terms. The city manager shall nominate, and the city council shall appoint the nine board members enumerated in Section 111.1 from among the residents of the city. The mayor shall appoint the board chair and the full city council shall appoint the vice-

chair. Board members shall serve for two consecutive years beginning September 1 of each odd-numbered year, or until their successors are appointed and qualified. If a vacancy occurs on the board during the pendency of a term, the city manager shall nominate, and city council shall appoint a new member to fill the vacancy for the unexpired term. The appointive board members shall serve without compensation. [Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to hazards of fire, explosions, hazardous conditions or fire protection systems and are not employees of the jurisdiction.]

[A] 111.4 Administration. The fire code official shall take immediate action in accordance with the decision of the board. During the pendency of the request to the board, the decision appealed from will be stayed unless the fire code official determines that a stay would create or allow the continuance of a substantial fire hazard threatening the lives or property of persons other than the appellant.

111.5 Meetings; quorum. The board shall adopt reasonable rules for the preparation of amendments to this code and for the conduct of hearings. The board shall convene at the request of the fire chief, the fire marshal, or its chair, with five members constituting a quorum. The board shall keep a record of its proceedings and decisions. The chair shall cause a copy of that record to be filed with the city secretary.

111.6 Code review and amendment. The board shall hear requests for amendments to this code and conduct its own regular code review. When the board, by a concurring vote of a majority of its members present, determines that a proposed amendment is appropriate for inclusion in this code, it shall recommend that amendment to the city council for adoption.

111.7 Appeals. If a person is aggrieved by a decision of a member of the fire department enforcing this code, the person may file with the fire code official a written request for a hearing before the board. In the request, the person shall name the fire department member whose decision is being appealed and specify the details of the controverted decision. The fire code official shall forward a copy of the request to the board chair, who shall convene a public meeting of the board within a reasonable time, not to exceed 30 days, after receipt of the request. After considering the relevant and material evidence, the board, by a concurring vote of a majority of its members present, shall render a decision sustaining, modifying or reversing the decision appealed. The chair shall cause the board's decision to be reduced to writing and a copy to be filed with the fire marshal and the city secretary. The decision of the board is the final administrative action of the city regarding the controverted decision. A person aggrieved by a decision of the board may, within 30 days after receiving notice of the board's decision, appeal to the District Court of Dallas County. The suit shall be filed against the board as defendant and service of process may be made upon the board by serving the city secretary."

35. Paragraph [A] 112.3.1, "Service," of Subsection [A] 112.3, "Notice of Violation," of Section 112, "Violations," of Part 2, "Administration and Enforcement," of

Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] **112.3.1 Service.** A notice of violation issued pursuant to this code shall be served upon the *owner*, the *owner’s* authorized agent, operator, occupant or other person responsible for the condition or violation, either by electronic or verbal notification, personal service, mail or by delivering the same to, and leaving it with, some person of responsibility on the premises. For unattended or abandoned locations, a copy of such notice of violation shall be posted on the premises in a conspicuous place at or near the entrance to such premises and the notice of violation shall be mailed by certified mail with return receipt requested or a certificate of mailing, to the last known address of the *owner*, the *owner’s* authorized agent, or occupant. Orders or notices shall set forth a time limit for compliance dependent upon the hazard and danger created by the violation. Orders or notices that are given verbally shall be confirmed by service in writing as herein provided.”

36. Subsection [A] 112.4, “Violation Penalties,” of Section 112, “Violations,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] **112.4 Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the *approved construction documents* or directive of the *fire code official*, or of a permit or certificate used under provisions of this code, shall be guilty of a Class C misdemeanor [~~SPECIFY OFFENSE~~], punishable by a fine [~~of~~] not to exceed \$2,000 [~~more than~~ [~~AMOUNT~~] dollars ~~or by imprisonment not exceeding~~ [~~NUMBER OF DAYS~~], ~~or both such fine and imprisonment~~]. Each day or part of a day that a violation continues after due notice has been served shall be deemed a separate offense.

[A] **112.4.1 Abatement of violation.** In addition to the imposition of the penalties herein described, the *fire code official* is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises.

112.4.2 Failure to discontinue. Any person who shall knowingly continue any operations after having been served with a notice to discontinue operations, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than \$1,500.

112.4.3 Agents and employees. A person who is the agent of the property owner or is an individual employed by the agent or property owner, is in control of the property, and knowingly allows the violation to exist is guilty of an offense if that person fails to provide the property owner’s name, street address, and telephone number to the fire code official.”

37. Subsection [A] 113.4, “Failure to Comply,” of Section 113, “Stop Work Order,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“**[A] 113.4 Failure to comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable [subject] to [fines established by the authority having jurisdiction] a fine of not less than \$1,000 or more than \$2,000.”

38. Subsection [A] 114.2, “Evacuation,” of Section 114, “Unsafe Structures or Equipment,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“**[A] 114.2 Evacuation.** The *fire code official* or the fire department official in charge of an incident shall be authorized to order the immediate evacuation of any occupied structure deemed unsafe when such structure has hazardous conditions that pose an imminent danger to structure occupants. Persons so notified shall immediately leave the structure, ~~[or]~~ premises, or vehicle and shall not enter or re-enter until authorized to do so by the *fire code official* or the fire department official in charge of the incident.

[A] 114.2.1 Stopping uses, evacuation. The *fire code official* is authorized to order an operation or use stopped or the evacuation of any premises, building or vehicle, or portion thereof, that has or is a fire hazard.”

39. Subsection [A] 114.4, “Notice,” of Section 114, “Unsafe Structures or Equipment,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“**[A] 114.4 Notice.** If an unsafe condition is found, the *fire code official* shall serve on the *owner* of the structure or the *owner's* authorized agent an electronic or [a] written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the *fire code official* acceptance or rejection of the terms of the order.”

40. Subsection [A] 114.5, “Method of Service,” of Section 114, “Unsafe Structures or Equipment,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] **114.5 Method of service.** Such notice shall be deemed properly served where a copy thereof is served in accordance with one of the following methods:

1. A copy is delivered to the *owner, the owner's authorized agent, operator or occupant of a structure* personally.
2. A copy is sent by certified or registered mail addressed to the *owner* at the last known address with return receipt requested.
3. A copy is delivered electronically or in any other manner as prescribed by local law.

If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner on the *owner's* authorized agent shall constitute service of notice on the *owner*.”

41. Subsection [A] 114.6, “Restoration or Abatement,” of Section 114, “Unsafe Structures or Equipment,” of Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended to read as follows:

“[A] **114.6 Restoration and abatement.** The structure or equipment determined to be unsafe by the *fire code official* is permitted to be restored to a safe condition. The *owner, the owner's* authorized agent, operator or occupant of a structure, premises or equipment deemed unsafe by the *fire code official* shall abate or cause to be abated or corrected such unsafe conditions either by repair, rehabilitation, demolition or other *approved* corrective action. To the extent that repairs, *alterations* or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, *alterations*, additions or change of occupancy shall comply with the requirements of Section 105.1.5 and the Dallas [~~International~~] Existing Building Code. Also as specified in Chapter 27, ‘Minimum Urban Rehabilitation Standards,’ of the Dallas City Code.”

42. Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended by adding a new Section 115, “Certificate of Occupancy,” to read as follows:

**“SECTION 115
CERTIFICATE OF OCCUPANCY**

[A] 115.1 Use and occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure, or portion thereof, shall be made until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of the *Dallas Building Code* or of other ordinances of the jurisdiction.

[A] 115.2 Certificate issued. After the building official inspects the building or structure and finds no violations of the provisions of the *Dallas Building Code*, or other laws that are enforced by the division of building inspection, the building official shall issue a certificate of occupancy that contains the following:

1. The address of the structure.
2. The name and address of the owner or tenant.
3. The use and occupancy, in accordance with the provisions of the *Dallas Building Code* or the *Dallas Existing Building Code*, whichever applies.

[A] 115.3 Temporary occupancy. The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid.

[A] 115.4 Revocation. The building official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of the *Dallas Building Code* wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of the *Dallas Building Code*.”

44. Part 2, “Administration and Enforcement,” of Chapter 1, “Scope and Administration,” of Part I, “Administrative,” of the 2021 International Fire Code is amended by adding a new Section 116, “Registration and Inspection of High Risk Buildings and Occupancies,” to read as follows:

**“SECTION 116
REGISTRATION AND INSPECTION OF HIGH RISK BUILDINGS AND
OCCUPANCIES**

116.1 Certificate of registration. A person commits an offense if he knowingly owns, operates or controls a high-risk building or occupancy in the city without a valid certificate of registration issued under this section. See Chapter 2 for definitions of high risk building or occupancy.

116.2 Display of certificate. A registrant shall present, upon request, a certificate of registration for examination by the *fire code official*.

116.3 Application for registration. To obtain a certificate of registration, a person shall submit an application to the *fire code official* on a form provided for that purpose. The applicant must be the person who will own, control or operate the high-risk building or occupancy. If the applicant owns, controls or operates more than one high risk building or occupancy at the same street address, only one certificate of registration is required for all of the buildings or occupancies at that street address. Only one certificate of registration is required for a single building that has more than one street address. The application shall be verified and contain the following information:

1. The applicant's name, address, telephone number and verified signature.
2. The name, street address and telephone number of the high-risk building's owner or occupancy's operator.
3. The name, address and main telephone number, if any, of the high-risk building or occupancy.
4. The name, address and telephone number of an emergency contact person that can be contacted 24 hours a day, seven days a week in an emergency.
5. The square footage of the high-risk building or occupancy, including the number of stories and the construction date of the building.
6. The type of occupancy or occupancies conducted in the high-risk building.
7. A description of any hazardous operations being conducted in the high-risk building or occupancy.
8. A description of fire protection features and any unique aspects of the high-risk building or occupancy.
9. The number of living units in residential facilities.
10. The number of patient rooms in health care facilities.

11. Such additional information as the *fire code official* deems necessary to the administration and enforcement of this section.

116.3.1 Multiple buildings or occupancies. If the application for a certificate of registration is being made for multiple buildings or occupancies at the same address, the information required in Section 116.3 must be provided for each building or occupancy at that address.

116.3.2 Notification. A registrant shall notify the *fire code official* within 10 days after any material change in the information in the application for a certificate of registration for a high-risk building or occupancy, including any changes in ownership.

116.4 Registration fee and inspection charge. The fee for a certificate of registration for a high-risk occupancy is \$150, plus an inspection charge in accordance with the following schedule.

BUILDING TYPE	INSPECTION FEE
Public Assembly	
Under 5,000 square feet	\$150.00
5,000 – 9,999 square feet	\$200.00
10,000 – 59,999 square feet	\$250.00
60,000 – 99,999 square feet	\$300.00
100,000 square feet and over	\$350.00
Hazardous Materials	
Under 5,000 square feet	\$360.00
5,000 – 9,999 square feet	\$370.00
10,000 – 59,999 square feet	\$400.00
60,000 -99,999 square feet	\$450.00
100,000 square feet and over	\$500.00
High-rise Office/Storage/Assembly	
Under 200,000 square feet	\$250.00
200,000 - 600,000 square feet	\$300.00
Over 600,000 square feet	\$400.00

High-rise Residential

Under 250 <i>dwelling units</i>	\$300.00
250 to 600 <i>dwelling units</i>	\$440.00
Over 600 <i>dwelling units</i>	\$551.00

Health Care Facilities

Under 100 patient rooms or individual <i>dwelling units</i>	\$300.00
100-500 patient rooms or individual <i>dwelling units</i>	\$478.00
Over 500 patient rooms or individual <i>dwelling units</i>	\$478.00

Exceptions:

1. The inspection charge shall not be assessed for inspecting a building or occupancy that is subject to inspection in order to obtain one of the following operational permits from the *fire code official*:
 - 1.1 Amusement building.
 - 1.2 Aviation facilities.
 - 1.3 Dry cleaning plant.
 - 1.4 Lumber yards and woodworking plants.
 - 1.5 State licensed facility (child care, residential care, small assisted living, adult day care).
2. The inspection charge shall not be assessed for any property that is exempt from paying city property taxes.
3. The inspection charge shall not be assessed for any property that has a current vacant building certificate of registration.

116.4.1 Multiple buildings or occupancies. If one certificate of registration is issued for multiple buildings or occupancies located at the same address, the inspection charge will be calculated as follows:

1. For public assembly, high-rise office/storage/assembly, and hazardous materials facilities, the inspection charge will be calculated using the aggregate area in square feet of all the buildings or occupancies.

2. For high-rise residential buildings and healthcare facilities, the inspection charge will be calculated using the aggregate number of living units or patient rooms in all buildings or occupancies.

116.4.2 Refunds. If a certificate of registration expires and no inspection was conducted by the *fire code official* during the registration term, then the full inspection charge may be refunded, if the fire chief receives a written request for the refund from the registrant within 90 days after expiration of the certificate of registration. Otherwise, no refund of the inspection charge will be made.

116.5 Expiration and renewal of registration. A certificate of registration for high risk buildings and occupancies expires according to the following schedule:

1. Assembly certificates expire one year after the date of issuance.
2. Hazardous materials certificates expire two years after the date of issuance.
3. High rise certificates expire two years after the date of issuance.
4. Health care certificates expire one year after the date of issuance.

[A] 116.5.1 Renewal. A renewal invoice will automatically be mailed to the applicant 30 days prior to the expiration date of the current certificate of registration. The applicant shall submit the required payment at least 15 days prior to the expiration of the certificate of registration.

116.6 Non-transferability. A certificate of registration for a high-risk building or occupancy is not transferable.

116.7 Property inspections. For the purpose of determining whether violations of this section or any other city ordinance or state or federal law exist, the *fire code official* is authorized at a reasonable time to inspect the interior and exterior of the high-risk building or occupancy, if the permission of the owner, operator, or other person in control is given or a search warrant is obtained.

116.7.1 Frequency. The *fire code official* shall inspect a high risk building or occupancy at least once during the term of the certificate of registration.

116.7.2 Registrant responsibilities. An applicant or registrant shall permit representatives of the *fire code official* to inspect the interior and exterior of a high risk building or occupancy for the purpose of ensuring compliance with the law, at reasonable times upon request. The applicant or registrant commits an offense if he, either personally or through an agent or employee, refuses to permit a lawful inspection of the high-risk building or occupancy as required by this subsection.

116.7.3 Reinspection. Whenever a high-risk building or occupancy is inspected by the *fire code official* and a violation of Section 116 or any other city ordinance or state or federal law applicable to the building is found, the premises will, after the expiration of any time limit for compliance given in a notice or order issued because of the violation, be reinspected by the *fire code official* to determine that the violation has been eliminated. Reinspection fees shall be issued in accordance with Section 107.7.

116.8 Duty of emergency contact person. The emergency contact person or person designated by the emergency contact person shall arrive at the property within one hour after notification by the city or emergency response personnel that an emergency condition has occurred on the property.”

45. Section 202, “General Definitions,” of Chapter 2, “Definitions,” of Part I, “Administrative,” of the 2021 International Fire Code is amended by adding, amending, or deleting the following definitions in alphabetical order:

“AERIAL SHELL. A pyrotechnic device that functions in the air.

AIRCRAFT MOTOR-VEHICLE FUEL-DISPENSING FACILITY. That portion of property where *flammable* or *combustible liquids* or gases used as aircraft [~~motor~~] fuels are stored and dispensed from fixed automotive-type dispensing equipment into the fuel tanks of aircraft and shall include all facilities essential thereto.

ALTERNATIVE STANDBY PERSONNEL. Standby personnel not employed by Dallas Fire Rescue that meet the minimum qualifications in Section 403.11.1.3.

[BG] 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

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

BINARY EXPLOSIVE. An explosive material composed of separate components, each of which is safe for storage and transportation and would not in itself be considered as an explosive.

BREAK (Aerial Shell). An individual effect from an aerial shell, generally either color or noise. Aerial shells can be single break, having only one effect, or multiple breaks, having two or more effects.

CERTIFICATE OF REGISTRATION. A written authority issued under Section 116 of this code to own, operate or control a commercial building within the city.

COMMERCIAL BUILDING. Any structure used or intended to be used for any type occupancy, except a single-family dwelling or a duplex dwelling.

[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.

[BF] FIRE AREA. The aggregate floor area enclosed and bounded by approved fire walls, fire barriers, exterior walls or horizontal assemblies of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above.

FIRE CODE OFFICIAL. The fire chief, fire marshal or [~~other~~] designated uniformed members of the Inspection and Life Safety Education Division [~~authority~~] charged with the administration and enforcement of the Dallas Fire Code [~~code, or a duly authorized representative~~].

FIRE DEPARTMENT INLET CONNECTION. A connection through which the fire department can pump water into a standpipe system or sprinkler system. Each hose connection shall have national standard fire hose coupling screw threads of 7 ½ threads per inch.

FIRE MARSHAL. The fire chief who is head of the Fire Prevention Division or uniformed members of the Inspection and Life Safety Education Division designated by the Fire Marshal who shall be charged with the administration and enforcement of the Dallas Fire Code.

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified standby personnel

when required by the fire chief, ~~[individuals]~~ 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 combustible ~~[composition]~~ or explosive composition, or any substance, combination of substances or device for the purpose of producing a visible or an audible effect ~~[for entertainment purposes]~~ by combustion, explosion, deflagration or detonation ~~[that meets the definition of 1.3G fireworks or 1.4G fireworks]~~. Fireworks include toy pistols, toy cannons, toy canes or toy guns in which explosives are used; firecrackers, torpedoes, sky-rockets, Roman candles, sparklers or other devices of like construction; any device containing an explosive or flammable compound; and any tablet or other device containing an explosive substance. Fireworks do not include auto flares; paper caps containing an average of ²⁵/100 of a grain of explosive content per cap or less; and toy pistols, toy canes, toy guns or other devices for use of such caps. Fireworks do not include snaps, party poppers or noisemakers which use no more than ⁸/1000 of a gram of explosive compound and do not emit light or smoke when detonated.

Fireworks, 1.3G. Large fireworks devices, which are *explosive materials*, intended for use in fireworks displays and designed to produce audible or visible effects by combustion, *deflagration* or *detonation*. Such 1.3G fireworks include, but are not limited to, firecrackers containing more than 130 milligrams (2 grains) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition and other display pieces which exceed the limits for classification as 1.4G fireworks. Such 1.3G fireworks are also described as Fireworks, UN 0335 by the DOTn.

Fireworks, 1.4G. Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion or *deflagration* that complies with the construction, chemical composition and labeling regulations of the DOTn for Fireworks, UN 0336, and the U.S. Consumer Product Safety Commission as set forth in CPSC 16 CFR Parts 1500 and 1507.

FIXED GROUND PIECE. A ground display piece having no moveable parts, such as a revolving wheel.

GROUND PIECE. A pyrotechnic device that functions on the ground. Ground pieces include fountains, roman candles, wheels and set pieces.

HEALTH CARE FACILITY. A facility regulated by the Texas Department of State Health Services and classified as a 1-1 or 1-2 occupancy as defined in the *Dallas Building Code*.

HIGH-PILED COMBUSTIBLE STORAGE. Storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet (3658 mm) in height. Where required by the *fire code official*, *high-piled combustible storage* also includes certain high-hazard commodities, such as rubber tires, Group

A plastics, *flammable liquids*, idle pallets and similar commodities, where the top of storage is greater than 6 feet (1829 mm) in height.

HIGH RISK BUILDING OR OCCUPANCY. The following are high risk buildings or occupancies because they are prone to a high loss of life or property in the event of a fire because of a high occupancy load, the nature of the process in use, impairment of the occupants, or limited emergency exiting:

1. high rise buildings;
2. health care facilities with an occupancy classification of 1-1 or 1-2;
3. public assembly type occupancies with an *occupant load* of 50 or more serving food and/or drinks. Examples: movie theaters, concert/theater halls,

Exception: Locations where fire watches are regularly conducted. (American Airlines Center, Dos Equis Pavilion)

4. occupancies where hazardous materials are stored or used including, but not limited to, all H occupancies as defined by the *Dallas Building Code*, all occupancies that dispense liquid or gaseous fuels, all occupancies storing hazardous materials in aboveground or underground tanks, and all occupancies that directly use hazardous production material in research, laboratory or production processes.

Exception: Buildings or occupancies equipped with a standby or emergency power generator with a combustible liquid storage tank that is connected to a fuel oil piping system containing no more than 660 gallons of combustible liquid in a closed system.

HOT WORK PERMITS. Permits ~~allowing [issued by the responsible person at the facility under the hot work permit program permitting]~~ welding or other hot work to be done in locations referred to in Section 3503[.3] and approved [prepermitted] by the *fire code official*.

~~**[HOT WORK PROGRAM.** A permitted program, carried out by *approved* facilities designated personnel, allowing them to oversee and issue permits for hot work conducted by their personnel or at their facility. The intent is to have trained, on-site, responsible personnel ensure that required hot work safety measures are taken to prevent fires and fire spread.]~~

INTERNATIONAL BUILDING CODE. Chapter 53 of the *Dallas City Code* also referred to as the *Dallas Building Code* as adopted by this jurisdiction. Any reference to the *International Building Code* shall mean the *Dallas Building Code* as adopted.

INTERNATIONAL ELECTRICAL CODE. Chapter 56 of the *Dallas City Code* also referred to as the *Dallas Electrical Code* as adopted by this jurisdiction. Any reference to the *International Electrical Code* shall mean the *Dallas Electrical Code* as adopted.

INTERNATIONAL ENERGY CONSERVATION CODE. Chapter 59 of the *Dallas City Code* also referred to as the *Dallas Energy Conservation Code* as adopted by this jurisdiction. Any reference to the *International Energy Conservation Code* shall mean the *Dallas Energy Conservation Code* as adopted.

INTERNATIONAL EXISTING BUILDING CODE. Chapter 58 of the *Dallas City Code* also referred to as the *Dallas Existing Building Code* as adopted by this jurisdiction. Any reference to the *International Existing Building Code* shall mean the *Dallas Existing Building Code* as adopted.

INTERNATIONAL FIRE CODE. Chapter 16 of the *Dallas City Code* also referred to as the *Dallas Fire Code* as adopted by this jurisdiction. Any reference to the *International Fire Code* shall mean the *Dallas Fire Code* as adopted.

INTERNATIONAL FUEL GAS CODE. Chapter 60 of the *Dallas City Code* also referred to as the *Dallas Fuel Gas Code* as adopted by this jurisdiction. Any reference to the *International Fuel Gas Code* shall mean the *Dallas Fuel Gas Code* as adopted.

INTERNATIONAL GREEN CONSTRUCTION CODE. Chapter 61 of the *Dallas City Code* also referred to as the *Dallas Green Construction Code* as adopted by this jurisdiction. Any reference to the *International Green Construction Code* shall mean the *Dallas Green Construction Code* as adopted.

INTERNATIONAL MECHANICAL CODE. Chapter 55 of the *Dallas City Code* also referred to as the *Dallas Mechanical Code* as adopted by this jurisdiction. Any reference to the *International Mechanical Code* shall mean the *Dallas Mechanical Code* as adopted.

INTERNATIONAL PLUMBING CODE. Chapter 54 of the *Dallas City Code* also referred to as the *Dallas Plumbing Code* as adopted by this jurisdiction. Any reference to the *International Plumbing Code* shall mean the *Dallas Plumbing Code* as adopted.

INTERNATIONAL RESIDENTIAL CODE. Chapter 57 of the *Dallas City Code* also referred to as the *Dallas One- and Two-Family Dwelling Code* as adopted by this jurisdiction. Any reference to the *International Residential Code* shall mean the *Dallas One- and Two-Family Dwelling Code* as adopted.

INTERNATIONAL SWIMMING POOL AND SPA CODE. Chapter 62 of the *Dallas City Code* also referred to as the *Dallas Swimming Pool and Spa Code* as adopted by this jurisdiction. Any reference to the *International Swimming Pool and Spa Code* shall mean the *Dallas Swimming Pool and Spa Code* as adopted.

KNOWINGLY. A person acts knowingly, or with knowledge, with respect to the nature of their conduct or to circumstances surrounding their conduct when the person is aware of the nature of the conduct or that the circumstances exist. A person acts knowingly, or with

knowledge, with respect to a result of their conduct when the person is aware that the conduct is reasonably certain to cause the result.

PYROTECHNIC OPERATOR. An individual approved to be responsible for pyrotechnics, pyrotechnic special effects materials, or both.

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.

~~**[RESPONSIBLE PERSON.** A person trained in the safety and fire safety considerations concerned with hot work. Responsible for reviewing the sites prior to issuing permits as part of the hot work permit program and following up as the job progresses.]~~

SAFETY CAP. A paper tube, closed at one end, that is placed over the end of the fuse of an aerial shell to protect it from accidental ignition.

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.

SPECIAL AMUSEMENT BUILDING. A building or portion of a building, that is temporary, permanent or mobile that contains a device or system that conveys passengers or provides a walkway along, around or over a course in any direction as a form of amusement arranged so that the egress path is not readily apparent due to visual or audio distractions or an intentionally confounded egress path, or is not readily available because of the mode of conveyance through the building or structure. The term includes a haunted house, a roller coaster-type ride within a building, a merry-go-round within a building, a submarine ride and similar amusements where the occupants are not in the open air.

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 in accordance with Section 105 and as normally calculated by the jurisdiction.

TEMPORARY ASSEMBLY PERMIT. A permit issued for a temporary public assembly gathering of more than 49 people for a civic, social, recreational or religious function in a building or structure not recognized as a Group A occupancy on the issued certificate of occupancy for the premise. Recognition of such temporary uses of a building or structure for activities that benefit the public at large are often found to be necessary for limited time periods, but the installation or performance of which, if permitted on a long-term basis, may not be in keeping with the intent and purpose of the zoning, building, fire and other applicable codes. Therefore, this permit serves as a vehicle for regulating and approving certain temporary assembly activities that benefit the public at large with implementation of the intent of the municipal code regulations when strict adherence would prevent the activity.

TEMPORARY STORAGE (Pyrotechnics). The storage of pyrotechnic special effects material on site for a period of 72 hours or less.

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.”

46. Subsection 301.2, “Permits,” of Section 301, “General,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“301.2 Permits. Permits shall be ~~[required as set forth]~~ in accordance with Section 105.5 ~~[for the activities or uses regulated by Sections 306, 307, 308, 315, and 320].”~~

47. Section 307, “Opening Burning, Recreational Fires and Portable Outdoor Fireplaces,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“SECTION 307 OPEN BURNING, RECREATIONAL FIRES AND PORTABLE OUTDOOR FIREPLACES

307.1 General. A person shall not kindle or maintain or authorize to be kindled or maintained any *open burning* unless conducted and *approved* in accordance with Sections 307.1.1 through 307.5.

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

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

307.2 Permit required. A permit shall be obtained from the *fire code official* in accordance with Section 105.5 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, open burning, air curtain incinerator operations, pit burning, trench burning or a bonfire. 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 regulation referenced elsewhere in this section may include, but not be limited to, the following:

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

307.2.1 Authorization. Where required by state or local law or regulations, *open burning* shall only be permitted with prior approval from the state or local air and water quality management authority, provided that all conditions specified in the authorization are followed.

307.3 Extinguishment authority. The *fire code official* is authorized to order the permit holder, another person responsible or the fire department to extinguish *open burning* that creates or adds to a hazardous or objectionable situation. ~~[Where *open burning* creates or adds to a hazardous situation, or a required permit for *open burning* has not been obtained, the *fire code official* is authorized to order the extinguishment of the *open burning* operation.]~~

307.4 Location. The location for *open burning* shall not be less than 300 [50] feet (91 440 [15 240] mm) from any structure, and provisions shall be made to prevent the fire from spreading to within 300 [50] feet (91 440 [15 240] mm) of any structure.

Exceptions:

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

307.4.1 Bonfires. A bonfire shall not be conducted within 50 feet (15 240 mm), or 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 [50 feet (15 240 mm)] of a structure shall be eliminated prior to ignition.

307.4.2 Recreational fires. *Recreational fires* shall not be conducted within 25 feet (7620 mm) of a structure or combustible material. Conditions that could cause a fire to spread within 25 feet (7620 mm) of a structure shall be eliminated prior to ignition.

307.4.3 Portable outdoor fireplaces. Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within 15 feet (3048 mm) of a structure or combustible material.

Exceptions:

1. Portable outdoor fireplaces used at one and two-family *dwelling*s.
2. Where buildings, balconies, and decks are protected by an approved automatic sprinkler system.

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 *Dallas Building Code*.

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

307.5 Attendance. *Open burning, air curtain incinerators, pit burns, trench burns, bonfires, recreational fires* and use of portable outdoor fireplaces shall be constantly attended, and an attendant shall remain on site a minimum of 30 minutes after ~~until~~ the fire is extinguished. Not fewer than one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other *approved* on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate utilization.”

48. Paragraph 308.1.4, “Open-Flame Cooking Devices,” of Subsection 308.1, “General,” of Section 308, “Open Flames,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“308.1.4 Open-flame cooking and heating devices. ~~[Charcoal burners and other o]~~Open-flame cooking devices, charcoal grills and other similar devices used for cooking shall not be located or used [operated] on combustible balconies, decks, or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family *dwelling*s, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20-pound (9.08 kg) LP-gas capacity] with an aggregate LP-gas capacity not to exceed 100 lbs (5 containers). All LP-gas contains shall be stored outside, as per Chapter 61.
2. Where buildings, balconies and decks are protected by an *automatic sprinkler system*, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity], with an aggregate LP-gas capacity not to exceed 40 lbs (2 containers).
3. LP-gas cooking or heating devices having LP-gas container with a water capacity not greater than 2 1/2 pounds [nominal 1 pound (0.454 kg) LP-gas capacity].”

49. Subparagraph 308.1.6.2, “Portable Fueled Open-Flame Devices,” of Paragraph 308.1.6, “Open-Flame Devices,” of Subsection 308.1, “General,” of Section 308, “Open Flames,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

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

Exceptions:

1. LP-gas-fueled devices used for sweating pipe joints or removing paint in accordance with Chapter 61.
2. Cutting and welding operations in accordance with Chapter 35.
3. Torches or flame-producing devices in accordance with Section 308.1.3 [~~308.4~~].
4. Candles and open-flame decorative devices in accordance with Section 308.3.”

50. Subparagraph 308.1.6.3, “Sky Lanterns,” of Paragraph 308.1.6, “Open Flame Devices,” of Subsection 308.1,” General,” of Section 308, “Open Flames,” of Chapter 3, “General

Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended 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 [untethered]sky lantern.”

51. Paragraph 308.3.1, “Open-Flame Decorative Devices,” of Subsection 308.3, “Group A Occupancies,” of Section 308, “Open Flames,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is retitled as Paragraph 308.3.1, “Candles and Other Open-Flame Decorative Devices.”

52. Paragraph 308.3.2, “Theatrical Performances,” of Subsection 308.3, “Group A Occupancies,” of Section 308, “Open Flames,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“308.3.2 Theatrical performances. Where *approved*, open-flame devices used in conjunction with theatrical performances are allowed to be used when adequate safety precautions have been taken in accordance with NFPA 160 and this code. Standby personnel shall be provided, when required by the fire code official.”

53. Section 311, “Vacant Premises,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is retitled as Section 311, “Vacant and Burned Premises.”

54. Subsection 311.1, “General,” of Section 311, “Vacant and Burned Premises,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“311.1 General. [~~Temporarily unoccupied~~] B[~~b~~]uildings, structures, premises or portions thereof, including tenant spaces, that are temporarily unoccupied, in the process of being vacated or burned, shall be safeguarded and maintained in accordance with Sections 311.1.1 through 311.6.”

311.1.1 Abandoned premises. Buildings, structures and premises for which an *owner* cannot be identified or located by dispatch of a certificate of mailing to the last known or registered address, which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized persons or for illegal purposes, or which present a danger of structural collapse or fire spread to adjacent properties shall be considered to be abandoned, declared unsafe and abated by demolition or rehabilitation in accordance with the Chapter 27 of the *Dallas City Code* and the Dallas~~International~~ Building Code.

311.1.2 Tenant spaces. Storage and lease plans required by this code shall be revised and updated to reflect temporary or partial vacancies.”

55. Paragraph 311.2.1, “Security,” of Subsection 311.2, “Safeguarding Vacant Premises,” of Section 311, “Vacant and Burned Premises,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“311.2.1 Security. Exterior and interior openings open to other tenants or unauthorized persons shall be maintained securely boarded, locked, [~~blocked~~] or barricaded [~~otherwise protected~~] to prevent entry by unauthorized individuals in accordance with Section O102, “Specifications for Securing Unsecured Vacant Structures,” of Appendix O. The *fire code official* is authorized to require a placard, post signs, erect barrier tape or take similar measures as necessary to secure public safety.”

56. Paragraph 311.2.2, “Fire Protection,” of Subsection 311.2, “Safeguarding Vacant Premises,” of Section 311, “Vacant and Partially Burned Premises,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“311.2.2 Fire protection. Fire protection systems shall be maintained in an operable condition at all times.

Exceptions:

1. When the premises have been cleared of all combustible materials and debris and, in the opinion of the *fire code official*, the type of construction, *fire separation distance* and security of the premises do not create a fire hazard. This exception does not apply to a building that must be registered under Chapter 48B, “Vacant Buildings,” of the *Dallas City Code*.

2. Where *approved* by the *fire code official*, buildings that will not be heated and where *fire protection systems* will be exposed to freezing temperatures, fire alarm and *automatic sprinkler systems* are permitted to be placed out of service and standpipes are permitted to be maintained as dry systems (without an automatic water supply), provided the building does not have contents or storage, and windows, doors and other openings are secured to prohibit entry by unauthorized persons. This exception does not apply to a building that must be registered under Chapter 48B, “Vacant Buildings,” of the *Dallas City Code*.
3. Where *approved* by the *fire code official*, fire alarm and *automatic sprinkler systems* are permitted to be placed out of service in seasonally occupied buildings: that will not be heated; where fire protection systems will be exposed to freezing temperatures; where *fire areas* do not exceed 12,000 square feet (1115 m²); and that do not store motor vehicles or hazardous materials. This exception does not apply to a building that must be registered under Chapter 48B, “Vacant Buildings,” of the *Dallas City Code*.

57. Subsection 311.2, “Safeguarding Vacant Premises,” of Section 311, “Vacant and Burned Premises,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended by adding a new Subsection 311.2.4, “Forty-Eight-Hour Notice,” to read as follows:

“311.2.4 Forty-eight-hour notice. The *fire code official* shall immediately notify the operator of an unsecured building to secure the building, and, if the building is not secured within 48 hours after the operator is notified, the *fire code official* may cause the building to be secured at the expense of the operator.”

65. Subsection 311.2, “Safeguarding Vacant Premises,” of Section 311, “Vacant and Burned Premises,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended by adding a new Subsection 311.2.5, “Ninety-Day Notice to Repair Burned or Partially Burned Structures,” to read as follows:

“311.2.5 Ninety-day notice to repair burned or partially burned structures. Persons owning or in charge of a structure that has been burned or partially burned, shall repair the structure to *Dallas City Code* standards or remove the structure from the premises within 90 days of notice by the *fire code official*. If a person is aggrieved by a decision of a member of the fire department enforcing this code, the person may appeal the decision to

the board of appeals if they file a written request for a hearing with the board of appeals within 30 days after the date of receiving notice of the *fire code official*'s decision."

66. Subsection 311.3, "Removal of Combustibles," of Section 311, "Vacant and Partially Burned Premises," of Chapter 3, "General Requirements," of Part II, "General Safety Provisions," of the 2021 International Fire Code is amended to read as follows:

"311.3 Removal of combustibles. Persons owning, or in charge or control of, a vacant building or portion thereof, shall remove therefrom all accumulations of combustible materials, flammable or combustible waste or rubbish and burned or partially burned materials and shall securely lock or otherwise secure doors, windows and other openings to prevent entry by unauthorized persons. The premises shall be maintained clear of waste or hazardous materials.

Exception[s]:

[1.] Buildings or portions of buildings undergoing additions, *alterations*, repairs or change of occupancy in accordance with the Dallas ~~[International]~~ *Building Code*, where waste is controlled and removed as required by Section 304.

~~[2. Seasonally occupied buildings.]~~"

67. Subsection 311.5, "Placards," of Section 311, "Vacant and Partially Burned Premises," of Chapter 3, "General Requirements," of Part II, "General Safety Provisions," of the 2021 International Fire Code is amended to read as follows:




"311.5 Placards. The fire code official is authorized to require the marking of a~~[A]~~ny vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 114 of this code relating to structural or interior hazards ~~[shall be marked]~~ as required by Sections 311.5.1 through 311.5.5. The fire code official shall notify the operator of the unsafe building to apply approved placards to the building, and, if placards are not applied within 48 hours after the operator is notified, the fire code official may cause placards to be applied to the building at the expense of the operator."

311.5.1 Placard location. Placards shall be applied on the front of the structure and be visible from the street. Additional placards shall be applied to the side of each entrance to the structure and on penthouses.

311.5.2 Placard size and color. Placards shall be 24 inches by 24 inches (610 mm by 610 mm) minimum in size with a red background, white reflective stripes and a white reflective border. The stripes and borders shall have a 2-inch (51 mm) minimum stroke.

311.5.3 Placard date. Placards shall bear the date of their application to the building and the date of the most recent inspection.

311.5.4 Placard symbols. The design of the placards shall use the following symbols:

1.  This symbol shall mean that the structure had normal structural conditions at the time of marking.
2.  This symbol shall mean that structural or interior hazards exist and interior fire-fighting or rescue operations should be conducted with extreme caution.
3.  This symbol shall mean that structural or interior hazards exist to a degree that consideration should be given to limit fire fighting to exterior operations only, with entry only occurring for known life hazards.
4. Vacant marker hazard identification symbols: The following symbols shall be used to designate known hazards on the vacant building marker. They shall be placed directly above the symbol.
 - 4.1. R/O—Roof open.
 - 4.2. S/M—Stairs, steps and landing missing.
 - 4.3. F/E—Avoid fire escapes.
 - 4.4. H/F—Holes in floor.

311.5.5 Informational use. The use of these symbols shall be informational only and shall not in any way limit the discretion of the on-scene incident commander.”

68. Subsection 314.2, “Fixtures and Displays,” of Section 314, “Indoor Displays,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“314.2 Fixtures and displays. Fixtures and displays of goods for sale to the public shall be arranged so as to maintain free, immediate and unobstructed access to exits as required by Chapter 10, and to *fire protection system* devices and equipment as required in Chapter 9. Visibility of *fire protection system* devices and unobstructed access to fire protection equipment shall be maintained throughout all display areas.”

69. Subsection 314.4, “Vehicles,” of Section 314, “Indoor Displays,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“314.4 Vehicles. Liquid-fueled or gaseous-fueled vehicles, aircraft, boats or other motorcraft shall not be located indoors except as follows:

1. The engine starting system is made inoperable or batteries are disconnected except where the *fire code official* requires that the batteries remain connected to maintain safety features.
2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19 L) (whichever is least). Fuel tank levels shall be inspected and *approved* by the *fire code official* prior to locating the vehicles or equipment indoors.
3. Fuel tanks and fill openings are closed and sealed to prevent tampering.
4. Vehicles, aircraft, boats or other motorcraft equipment are not fueled or defueled within the building.
5. Fuel systems are inspected for leaks.
6. The location of vehicles or equipment does not block or obstruct means of egress.
7. Fuel for the vehicle or equipment is stored in *approved* containers at an *approved* location outside of the building.
8. Fuel spills are cleaned up immediately.
9. Refueling is performed outside of the building at an *approved* site.
10. Keys to all vehicles, aircraft, boats or other motorcraft are maintained at the display site and available for use by the *fire code official*.

Electric and hybrid vehicles on display shall be safeguarded per the vehicle manufacturer’s written directions.”

70. Subsection 316.5, “Security Device,” of Section 316, “Hazards to Fire Fighters,” of Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021

International Fire Code is amended by adding a new Paragraph 316.5.1, “Electrified Fences and Barriers,” to read as follows:

“316.5.1 Electrified fences and barriers. Electrified fences and barriers shall comply with the Texas Local Government Code, Section 51A-4.602 of the Dallas City Code, and this section.

316.5.1.1 Existing (prior to September 1, 2019) electrified fences and barriers. Existing electrified fences and barriers shall comply with all of the following requirements:

1. Only listed and labeled electrified fencing materials shall be used.
2. Electrified fences shall be provided with an off/on status indicator.
3. Electrified fences shall be clearly marked with warning signs. Warning signs shall be placed at each entrance to the property on the electrified fence and at a maximum of 30 foot intervals along the entire perimeter of the fence line.
4. Warning signs shall be printed on both sides in both English and Spanish with the following: “WARNING ELECTRIFIED FENCE” and contain the international symbol for electric shock hazard. Warning signs shall be reflective with a minimum 2 inch letter height, minimum stroke of ½ inch and with a contrasting background.
5. Electrified fences shall not be energized during normal hours of operation.
6. An *approved* method to manually deactivate the *power source* to all portions of the electrified fence shall be provided and maintained on the exterior of and separated from it by no less than twelve inches.

316.5.1.2 Electrified fences and barriers installed after September 1, 2019. Electrified fences and barriers installed after September 1, 2019, shall comply with the Texas Local Government Code.”

71. Chapter 3, “General Requirements,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended by adding a new Section 322, “Parade Floats,” to read as follows:

**“SECTION 322
PARADE FLOATS**

322.1 Decorative material. Decorative material on parade floats shall be noncombustible or flame retardant.

322.2 Fire protection. Motorized parade floats and towing apparatus shall be provided with a minimum 2-A: 10-B:C rated portable fire extinguisher readily accessible to the operator.”

72. Subsection 401.1, “Scope,” of Section 401, “General,” of Chapter 4, “Emergency Planning and Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“401.1 Scope. Reporting of fires and emergencies, coordination with emergency response forces, emergency plans and procedures for managing or responding to emergencies shall comply with the provisions of this section.

~~[Exception: Firms that have approved on-premises fire fighting organizations and that are in compliance with approved procedures for fire reporting.]”~~

73. Subsection 401.5, “Making False Report,” of Section 401, “General,” of Chapter 4, “Emergency Planning and Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“401.5 ~~[Making f]~~False alarms [report]. ~~[A person]~~ False alarms shall not be given, signaled, or transmitted or caused or permitted to be given, signaled or transmitted in any manner [a false alarm].”

74. Subsection 403.1, “General,” of Section 403, “Emergency Preparedness Requirements,” of Chapter 4, “Emergency Planning and Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended by adding a new Paragraph 403.1.1, “Warning Signs,” to read as follows:

“403.1.1 Warning signs. The operator of premises housing a hotel, motel, boarding house, lodging house, tenement house, convalescent home, hospital, child care facility or similar place of abode shall provide, post and maintain warning signs in each *dwelling unit* that states: ANY PERSON WHO CAUSES THE ACCIDENTAL BURNING OF ANY PART OF THIS BUILDING OR ITS CONTENTS IS SUBJECT TO A FINE OF \$2,000. CITY OF DALLAS FIRE CODE.”

75. Paragraph 403.2.3, “Fire Watch Personnel,” of Subsection 403.2, “Group A Occupancies,” of Section 403, “Emergency Preparedness Requirements,” of Chapter 4, “Emergency Planning and Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“403.2.3 Standby [~~Fire-watch~~] personnel. Standby [~~Fire-watch~~] personnel shall be provided where required by Section 403.11.1 and 403.11.1.3.”

76. Subsection 403.4, “Group E Occupancies,” of Section 403, “Emergency Preparedness Requirements,” of Chapter 4, “Emergency Planning and Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended 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 comply with Sections 403.4.1 through 403.4.3.”

403.4.1 First emergency evacuation drill. The first emergency evacuation drill of each school year shall be conducted within 10 days of the beginning of classes.

403.4.2 Time of day. Emergency evacuation drills shall be conducted at different hours of the day or evening, during the changing of classes, when the school is at assembly, during the recess or gymnastic periods, or during other times to avoid distinction between drills and actual fires.

403.4.3 Assembly points. Outdoor assembly areas shall be designated and shall be located a safe distance from the building being evacuated so as to avoid interference with fire department operations. The assembly areas shall be arranged to keep each class separate to provide accountability of all individuals.

77. Subparagraph 403.9.1.1, “Evacuation Diagrams,” of Paragraph 403.9.1, “Group R-1 Occupancies,” of Subsection 403.9, “Group R Occupancies,” of Section 403, “Emergency Preparedness Requirements,” of Chapter 4, “Emergency Planning and

Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“403.9.1.1 Evacuation diagrams. A diagram depicting two evacuation routes shall be posted on or immediately adjacent to every required egress door from each hotel or motel *sleeping unit* and shall include the following:

1. A description of the fire alarm system and an explanation of its operation (including the meaning of signals).
2. A map showing all emergency *exit* locations and how they are designated.
3. Information on how to report a fire or other emergency to the Dallas Fire-Rescue Department and/or building management.
4. A warning not to use elevators in case of fire.
5. General instructions as to self-protective measures a person should take if trapped in a room by fire or smoke.”

78. Paragraph 403.10.2, “High-Rise Buildings,” of Subsection 403.10, “Special Uses,” of Section 403, “Emergency Preparedness Requirements,” of Chapter 4, “Emergency Planning and Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“403.10.2 High-rise buildings. An *approved* fire safety and evacuation plan in accordance with Sections 404 and O103 of Appendix O shall be prepared, submitted in a format acceptable to the *fire code official*, and once approved, shall be maintained for high-rise buildings.”

79. Paragraph 403.11.1, “Fire Watch Personnel,” of Subsection 403.11, “Special Requirements of Public Safety,” of Section 403, “Emergency Preparedness Requirements,” of Chapter 4, “Emergency Planning and Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“403.11.1 Standby [~~Fire watch~~] personnel. Where, in the opinion of the *fire code official*, it is essential for public safety in a place of assembly, occupied building, or any other place where people congregate, because of the number of persons, failure of life safety systems, or the nature of the performance, exhibition, display, contest or activity, the

owner, agent or lessee shall provide one or more standby [~~fire watch~~] personnel, as required and *approved*. Standby [~~Fire watch~~] personnel shall comply with Sections 403.11.1.1 through [~~and~~] 403.11.1.3[2].

During times when a property owner elects to use standby personnel that is not employed by Dallas Fire Rescue, *alternative standby personnel* may be used. *Alternative standby personnel* must meet the qualifications in Section 403.11.1.3.

The *fire code official* reserves the authority to designate fire service personnel exclusively to conduct a fire watch when the fire code official:

1. determines that the system impairment presents an increased risk to the public or occupants within a large public venue or event; or
2. has just cause to believe *alternative standby personnel* have not or cannot conduct the fire watch protocols properly.

The *fire code official* reserves the authority to monitor all fire watches conducted by *alternative standby personnel*. Failure to properly follow the listed fire watch protocols by *alternative standby personnel* may result in a municipal citation to the person in control of the facility at the time of the infraction. After a citation has been issued, a subsequent failure to properly follow the listed fire watch protocols may result in immediate forfeiture of the use of *alternative standby personnel* and subsequent fire watch duties may be conducted exclusively by Dallas Fire Rescue personnel for the duration of the fire watch.

403.11.1.1 Duty times. Standby [~~Fire watch~~] personnel shall remain on duty while places requiring a fire watch are open to the public, occupied, or when an activity requiring a fire watch is being conducted.

403.11.1.2 Duties. On-duty standby [~~fire watch~~] personnel shall have the following responsibilities:

1. Keep diligent watch for fires, obstructions to *means of egress* and other hazards.
2. Take prompt measures for remediation of hazards and extinguishment of fires that occur.
3. Take prompt measures to assist in the evacuation of the public from the structures.
4. Be capable of performing the sole duty of providing a fire watch.
5. For alternative standby personnel, provide a schedule of personnel shifts to the *fire code official* 24 hours in advance of each day of fire watch operations.

403.11.1.3 Alternative standby personnel qualifications. Alternative standby personnel shall meet the following qualifications:

1. Must be at least 21 years of age.
2. Must be familiar with the layout of the facility.
3. Must be physically capable of performing the fire watch duties, including walking and climbing stairs.
4. Must be capable of performing continuous intervals of monitoring.
5. Must be equipped with at least two means of contacting 9-1-1.
6. Must be familiar with functionality of the life safety systems onsite, both operational and non-operational.
7. Must be familiar with and trained in the use of portable fire extinguishers.

80. Paragraph 403.11.3, “Crowd Managers,” of Subsection 403.11, “Special Requirements for Public Safety,” of Section 403, “Emergency Preparedness Requirements,” of Chapter 4, “Emergency Planning and Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“403.11.3 Crowd managers. Where facilities or events involve a gathering of more than 250 [~~500~~] people, crowd managers shall be provided in accordance with Sections 403.11.3.1 through 403.11.3.3.

403.11.3.1 Number of crowd managers. Not fewer than two trained crowd managers, and not fewer than one trained crowd manager for each 250 persons or portion thereof, shall be provided for the gathering.

Exceptions:

1. Outdoor events with fewer than 1,000 persons in attendance shall not require crowd managers.
2. Assembly occupancies used exclusively for religious worship with an *occupant load* not exceeding 1,000 shall not require crowd managers.

3. The number of crowd managers shall be reduced where, in the opinion of the *fire code official*, the fire protection provided by the facility and the nature of the event warrant a reduction.

403.11.3.2 Training. Training for crowd managers shall be *approved and acceptable to the fire code official*. Credentials or other documents certifying *approved* training shall be provided to the fire code official upon request.

403.11.3.3 Duties. The duties of crowd managers shall include, but not be limited to:

1. Conduct an inspection of the area of responsibility and identify and address any egress barriers.
2. Conduct an inspection of the area of responsibility to identify and mitigate any fire hazards.
3. Verify c o m p l i a n c e with all permit conditions, including those governing pyrotechnics and other special effects.
4. Direct and assist the event attendees in evacuation during an emergency.
5. Assist emergency response personnel where requested.
6. Other duties required by the *fire code official*.
7. Other duties as specified in the fire safety plan.”

85. Paragraph 404.2.2, “Fire Safety Plans,” of Subsection 404.2, “Contents,” of Section 404, “Fire Safety, Evacuation and Lockdown Plans,” of Chapter 4, “Emergency Planning and Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“404.2.2 Fire safety plans. Fire safety plans shall include the following:

1. The procedure for reporting a fire or other emergency.
2. The life safety strategy including the following:
 - 2.1. Procedures for notifying occupants, including areas with a private mode alarm system.
 - 2.2. Procedures for occupants under a defend-in-place response.

- 2.3. Procedures for evacuating occupants, including those who need evacuation assistance.
 3. Site plans indicating the following:
 - 3.1. The occupancy assembly point.
 - 3.2. The locations of fire hydrants.
 - 3.3. The normal routes of fire department vehicle access.
 4. Floor plans identifying the locations of the following:
 - 4.1. *Exits*.
 - 4.2. Primary evacuation routes.
 - 4.3. Secondary evacuation routes.
 - 4.4. Accessible egress routes.
 - 4.4.1. Areas of refuge.
 - 4.4.2. Exterior areas for assisted rescue.
 - 4.5. Refuge areas associated with *smoke barriers* and *horizontal exits*.
 - 4.6. Manual fire alarm boxes.
 - 4.7. Portable fire extinguishers.
 - 4.8. Fire extinguishing system controls [~~Occupant use hose stations~~].
 - 4.9. Fire alarm annunciators and controls.
 5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
 6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.
 7. Identification and assignment of personnel responsible for maintenance, housekeeping and controlling fuel hazard sources.”
86. Table 405.3, “Fire and Evacuation Drill Frequency and Participation,” of Subsection 405.3, “Frequency,” of Section 405, “Emergency Evacuation Drills,” of Chapter

4, “Emergency Planning and Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended to read as follows:

“TABLE 405.3

**FIRE AND EVACUATION DRILL
FREQUENCY AND PARTICIPATION**

GROUP OR OCCUPANCY	FREQUENCY	PARTICIPATION
Group A	Quarterly	Staff
Group B ^a	Annually	All occupants
Group B (Ambulatory care facilities)	Quarterly on each shift	Staff
Group B ^a (Clinic, outpatient)	Annually	Staff
Group E	Monthly ^a	All occupants
Group F	Annually	Employees
Group I-1	Semiannually on each shift	All occupants
Group I-2	Quarterly on each shift	Staff
Group I-3	Quarterly on each shift ^a	Staff
Group I-4	Monthly on each shift	All occupants
Group R-1	Quarterly on each shift	Employees
Group R-2 ^b	Four annually	All occupants
Group R-4	Semiannually on each shift	All occupants
<u>High-rise Buildings</u>	<u>Annually</u>	<u>All occupants</u>

a. Emergency evacuation drills are required in Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

b. Emergency evacuation drills in Group R-2 college and university buildings shall be in accordance with Section 403.9.2.1. Other Group R-2 occupancies shall be in accordance with Section 403.9.2.2.”

87. Subsection 405.5, “Time,” of Section 405, “Emergency Evacuation Drills,” of Chapter 4, “Emergency Planning and Preparedness,” of Part II, “General Safety Provisions,” of the 2021 International Fire Code is amended 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. In severe climates, the *fire code official* shall have the authority to modify the emergency evacuation drill termination points and frequency.
2. In Groups 1-1, I-2, 1-3 and R-4, where staff-only emergency evacuation drills are conducted after visiting hours or where care recipients are expected to be asleep, a coded announcement shall be an acceptable alternative to audible alarms.
3. Notification of teacher/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."

88. Subsection 501.3, "Construction Documents," of Section 501, "General," of Chapter 5, "Fire Service Features," of Part III, "Building and Equipment Design Features," of the 2021 International Fire Code is amended to read as follows:

"501.3 Construction documents. *Construction documents* for proposed fire apparatus access, location of *fire lanes*, [~~security gates across fire apparatus access roads and construction documents and hydraulic calculations for~~] fire hydrant systems, traffic calming devices and limited access gates that obstruct fire apparatus access roads (in accordance with Section O104, "Limited Access Gates" of Appendix O) shall be submitted to the fire department for review and approval prior to construction or installation.

501.3.1 Site safety plan. The *owner* or *owner's* authorized agent shall be responsible for the development, implementation and maintenance of an *approved* written *site safety plan* in accordance with Section 3308.

501.3.2 Fire apparatus access road plan review fees. Plans for fire apparatus access roads (in accordance with Section 503 and Appendix D) shall be submitted with a nonrefundable \$350 plan review fee. This applies to new and existing construction.

Exception: No plan review fee shall be charged when the plans are directly related to construction conducted on a building or premises pursuant to a valid building permit issued by the building official.

501.3.3 Limited access gate plan review fees. Plans for limited access gates that obstruct fire apparatus access roads (in accordance with Section O104, 'Limited Access Gates' of Appendix O) shall be accompanied by a nonrefundable \$300 plan review fee. This plan review fee applies to new and existing construction."

89. Subsection 501.4, "Timing of Installation," of Section 501, "General," of Chapter 5, "Fire Service Features," of Part III, "Building and Equipment Design Features," of the 2021 International Fire Code is amended to read as follows:

“501.4 Timing of installation. Where fire apparatus access roads or a water supply for fire protection are 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 the foundation of any structure~~], such protection shall be installed and made serviceable prior to and during the time of construction except when *approved* alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection where construction of new roadways allows passage by vehicles in accordance with Section 505.2].~~

90. Section 503, “Fire Apparatus Access Roads,” of Chapter 5, “Fire Service Features,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“SECTION 503

FIRE APPARATUS ACCESS ROADS

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.4 [3].

503.1.1 Buildings and facilities. *Approved* fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the *exterior walls* of the first story of the building as measured by an *approved* route around the exterior of the building or facility. Group R-3 and Group U occupancies shall have a fire apparatus access road within 200 feet (60 960 mm) of any portion of the exterior wall of the first story of the building as measured along a minimum of 10 feet wide unobstructed pathway around the exterior walls of the structure. Fire apparatus access roads shall be required within 50 feet (15 240 mm) of any fire department connections. Provisions of this section may be modified by the *fire code official*. Refer to Section 912 for additional requirements for access to fire department connections and Section 504.1 for fire department personnel access to buildings.

Exceptions:

1. The *fire code official* is authorized to increase the dimension of 150 feet (45 720 mm) where any of the following conditions occur:
 - 1.1. The building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
 - 1.2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an *approved* alternative means of fire protection is provided.

- 1.3. There are not more than two Group R-3 or Group U occupancies.
2. Where *approved* by the *fire code official*, fire apparatus access roads shall be permitted to be exempted or modified for solar photovoltaic power generation facilities.

503.1.2 Additional access. The *fire code official* is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

503.1.3 High-piled storage. Fire department vehicle access to buildings used for *high-piled combustible storage* shall comply with the applicable provisions of Chapter 32.

503.1.4 Construction, alteration or demolition. Fire department vehicle access to buildings under construction, alteration or demolition shall comply with the applicable provisions of Section 3310.1.

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8.

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

Exceptions:

1. Group R-3 and Group U occupancy fire apparatus access roads that are less than 100 feet (30 480 mm) in length are permitted to have an unobstructed width of not less than 12 feet (3658 mm) when *approved* by the fire chief.
2. Individual entry and exit lanes with a minimum width of 12 feet (3658 mm) each, separated by an island no wider than 20 feet (6096 mm).

503.2.2 Authority. The *fire code official* shall have the authority to require or permit modifications to the required access widths and vertical clearances where they are inadequate for fire or rescue operations or where necessary to meet aerial apparatus access, and the public safety objectives of the jurisdiction.

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of 85,000 pounds (38 555 kg)[fire apparatus] and shall be of concrete or asphalt [surfaced] so as to provide all-weather driving capabilities. All other driving surfaces shall receive written approval by the *fire code official* prior to installation.

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be determined by the *fire code official*.

503.2.5 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an *approved* area for turning around fire apparatus in accordance with Appendix D.

503.2.6 Bridges and elevated surfaces. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO LRFD Bridge Design Specifications~~[HB-17]~~. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the *fire code official*. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces that are not designed for such use, *approved* barriers, *approved* signs or both shall be installed and maintained when required by the *fire code official*. Existing approved bridges or elevated surfaces shall be maintained in accordance with AASHTO HB-17 or AASHTO LRFD as determined through technical analysis.

503.2.7 Grade. The maximum vertical grade for all [of the] fire apparatus access roads is 10 percent for concrete roads and 8 percent for asphalt roads. The maximum cross grade for all [shall be within the limits established by the] fire [code official based on the fire department's] apparatus access roads is 2 percent.

503.2.8 Angles of approach and departure. The angles of approach and departure for fire apparatus access roads shall be within the limits established by the *fire code official* based on the fire department's apparatus.

503.3 Marking. Approved striping, or when allowed [Where required] by the fire code official, approved signs, or both~~[other approved notices or markings that include the words "NO PARKING - FIRE LANE"]~~ shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which *fire lanes* are designated 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 marked by painted lines of red traffic paint 6 inches (152 mm) in width to show the boundaries of the lane. The words NO PARKING - FIRE LANE or FIRE LANE - NO PARKING shall appear in 4-inch (102 mm) white letters at 25-foot (7620 mm) 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 inches (305 mm) wide and 18 inches (457 mm) high. Signs shall be painted on a white background with letters and borders in red, using not less than 2-inch (51 mm) lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be 6 feet, 6 inches (1981 mm) above finished grade. Signs shall be spaced not more than 50 feet (15 240 mm) apart. Signs may be installed on permanent buildings or walls or as approved by the fire code official. Signs shall be posted on both sides of the fire apparatus road.

Exception: Group R-3 and Group U occupancy fire apparatus access roads are not required to be marked when *approved* by the fire code official.

503.3.1 Unapproved markings. No person shall mark, post or otherwise identify any road or other passageway that is not a fire apparatus access road as a fire lane or in a manner that creates confusion as to whether the road or a passageway is a fire lane.

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Sections 503.2.1 and 503.2.2 and any area marked as a fire lane as described in Section 503.3, shall be maintained at all times. The operator of the premises shall be responsible for removal of obstructions in a fire lane.

503.4.1 Traffic calming devices. Traffic calming devices shall be prohibited unless *approved* by the *fire code official*.

Exception: Devices 3 inches or less in height.

503.4.2 Noncompliance. Any unauthorized vehicle or obstruction in a marked fire lane is:

1. Subject to removal by the operator of the premises, with the expense of removal and storage to be borne by the registered owner of the vehicle;
2. Subject to citation, as well as removal, by the fire chief or a police officer; and prima facie evidence that the person in whose name the vehicle is registered is guilty of a violation of the parking provisions of this section.

503.5.1 Secured gates and barricades. When required, gates and barricades shall be secured in an *approved* manner. Roads, trails and other accessways that have been closed and obstructed in the manner prescribed by Section 503.5 shall not be trespassed on or used unless authorized by the *owner* and the *fire code official*.

Exception: The restriction on use shall not apply to public officers acting within the scope of duty.

503.6 Limited access [~~Security~~] gates. The installation of limited access [~~security~~] gates across a fire apparatus access road shall be *approved* by the *fire code official*. Where limited access [~~security~~] gates are installed, they shall have an *approved* means of emergency operation in accordance with Section O104, "Limited Access Gates," of Appendix O. The limited access [~~security~~] gates and the emergency operation shall be maintained operational at all times in accordance with Section O104, "Limited Access Gates," of Appendix O. Electric gate operators, where provided, shall be approved by the fire code official and *listed* in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200."

91. Subsection 504.3, "Stairway Access to Roof," of Section 504, "Access to Building Openings and Roofs," of Chapter 5, "Fire Service Features," of Part III, "Building and

Equipment Design Features,” of the 2021 International Fire Code is amended by adding a new Paragraph 504.3.1, “Locks,” to read as follows:

“504.3.1 Locks. Doors providing roof access shall remain unlocked at all times or be provided with an *approved* locking device.”

92. Subsection 505.1, “Address Identification,” of Section 505, “Premises Identification,” of Chapter 5, “Fire Service Features,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“505.1 Address identification. New and existing buildings shall be provided with *approved* address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 6 inches (152.4 mm) [~~4 inches (102 mm)~~] high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the *fire code official*, address identification shall be provided in additional *approved* locations to facilitate emergency response. Where access is by means of a private road and the buildings do not immediately front a street, and/or the buildings 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* [sign or] 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 with a border. Address identification numbers 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.

505.1.1 Authority. The fire code official shall have the authority to require additional room numbers, suite numbers, or unit numbers to facilitate emergency response.”

93. Subsection 506.1, “Where Required,” of Section 506, “Key Boxes,” of Chapter 5, “Fire Service Features,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting

purposes, the *fire code official* is authorized to require a key box to be installed in an *approved* location. The key box shall be of an *approved* type *listed* in accordance with UL 1037, and shall contain keys to gain necessary access as required by the *fire code official*. Interior key boxes are required in all buildings having floors used for human occupancy located more than 75 feet (22 860 mm) above the lowest level of the fire department access. Exterior key boxes are required for the following buildings:

1. Big box/super center stores 50,000 sq. feet or larger (Examples: Home Depot, Lowes, Best Buy, Wal-Mart, Target).
2. Apartment buildings.
3. Schools.
4. Fire Stations.
5. Multi-story commercial buildings.

Exception: All non-required (owner option) exterior key boxes shall be installed per Section 506.3. The *fire code official* may allow installation of an *approved* key switch in an *approved* location in lieu of an exterior key box.”

94. Section 506, “Key Boxes,” of Chapter 5, “Fire Service Features,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding a new Subsection 506.3, “Installation of Key Boxes,” to read as follows:

“506.3 Installation of key boxes. Interior key boxes shall be installed within 12 feet (3658 mm) of the emergency elevator, visible from the entrance to the emergency elevator, and not more than 5 feet 6 inches (1676 mm) above the main entrance level of the building. Exterior key boxes shall be installed within 12 feet (3658 mm) of the main building entrance, visible from the direction of entry, and not more than 5 feet 6 inches (1676 mm) and not less than 42 inches (1067 mm) above the main entrance level of the building. The *fire code official* may approve alternate locations.

506.3.1 Contents. Exterior key boxes shall contain keys to gain access to the building as required by the *fire code official*. Interior key boxes shall contain designated keys essential to emergency operations, including but not limited to the following. There shall be 3 separate sets of appropriately labeled keys maintained in the interior key box. The key sets shall include the following:

1. Elevator keys capable of accessing all floors in the building.

- 1.1 Elevator door keys and/or access tools.
2. Stairway keys.
3. Fire control station keys.
4. Alarm system keys.
5. Key fobs, if required.
6. Access cards, if required.
7. Sprinkler/standpipe/fire pump room keys.

506.3.2 Key set arrangements. Three sets of building emergency access keys shall be provided for fire department use in the interior key box for all high-rise buildings.

506.3.3 Keys. Each key set and key shall be identified as to its specific usage.”

95. Subsection 507.2, “Type of Water Supply,” of Section 507, “Fire Protection Water Supplies,” of Chapter 5, “Fire Service Features,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“507.2 Type of water supply. A water supply shall consist of city water mains. The fire code official may approve alternate forms of water supply such as reservoirs, pressure tanks, elevated tanks, [water mains] or other fixed systems capable of providing the required fire flow. Written approval of the fire code official shall be obtained before installation of private fire service mains and hydrants.

507.2.1 Private fire service mains. Private fire service mains and appurtenances shall be installed with approval from Dallas Water Utilities and in accordance with approved plans and NFPA 24.

507.2.1.1 Installation. Private fire hydrants shall comply with the Dallas Water Utilities Addendum to COG 2.14. The hydrants shall be provided with one 4-inch (102 mm) nominal I.D. outlet with threads complying with File No. 684A-9 and two 2½-inch (64 mm) nominal I.D. outlets with 7½-inch (191 mm) national standard fire hose coupling screw threads per inch.

507.2.2 Water tanks. Water tanks for private fire protection shall be installed in accordance NFPA 22.”

96. Subsection 507.3, “Fire Flow,” of Section 507, “Fire Protection Water Supplies,” of Chapter 5, “Fire Service Features,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“507.3 Fire flow. Fire flow requirements for buildings or portions of buildings and facilities shall be in accordance with Appendix B, “Fire-Flow Requirements for Buildings.” ~~[determined by an approved method.]~~”

97. Subsection 507.4, “Water Supply Test,” of Section 507, “Fire Protection Water Supplies,” of Chapter 5, “Fire Service Features,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“507.4 Water supply test. 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.” 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.* ~~[or~~ *Approved* documentation of the test shall be provided to the *fire code official* prior to final approval of the water supply system.”

98. Subsection 507.5, “Fire Hydrant Systems,” of Section 507, “Fire Protection Water Supplies,” of Chapter 5, “Fire Service Features,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.8[6] and Appendix C, “Fire Hydrant Locations and Distribution.””

507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an *approved* route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the *fire code official*. A street or block more than 800 feet (244 m) in length shall have at least one fire hydrant located on it, even if covered by other fire hydrants.

Exceptions:

1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).
2. For buildings equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

3. Buildings or facilities of noncombustible construction less than 500 square feet (46.45 m²).

507.5.1.1 Hydrant for standpipe systems. Buildings equipped with a standpipe system installed in accordance with Section 905 shall have a fire hydrant within 400 [100] feet (122 m) [(30-480 mm)] of the fire department connections.

Exception: The distance shall be permitted to exceed 400 [100] feet (122 m) [(30-480 mm)] where *approved* by the *fire code official*.

507.5.2 Inspection, testing and maintenance. Fire hydrant systems shall be subject to periodic tests as required by the *fire code official*. Fire hydrant systems shall be maintained in an operative condition at all times this shall be repaired were defective. Additions, repairs, alterations and servicing shall comply with *approved* standards. Records of tests and required maintenance shall be maintained.

507.5.3 Private fire service mains and water tanks. Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with NFPA 25 at the following intervals:

1. Private fire hydrants of all types: Inspection annually and after each operation; flow test and maintenance annually.
2. Fire service main piping: Inspection of exposed, annually; flow test every 5 years.
3. Fire service main piping strainers: Inspection and maintenance after each use.

Records of inspections, testing and maintenance shall be maintained.

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.

507.5.5 Clear space around hydrants. A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants, except as otherwise required or *approved*.

507.5.6 Physical protection. Where fire hydrants are subject to impact by a motor vehicle, guard posts or other *approved* means shall comply with Section 312.

507.5.7 Hydrant color coding. All fire hydrants shall be color coded to indicate the size of the water supply main. Each hydrant shall have at least 4 inches (102 mm) of each dome color coded as follows:

1. Red for 4-inch (102 mm) mains.
2. Silver for 6-inch (152 mm) mains.

3. Blue for 8-inch (203 mm) mains.
4. Yellow for 10-inch (254 mm) or larger mains.
5. Public hydrant barrels shall be painted silver. Private hydrant barrels shall be painted Rust-Oleum Safety Green or other *approved* color.

507.5.8 Location. All fire hydrants shall be located a minimum of 2½ feet (762 mm) and a maximum of 7½ feet (2286 mm) from the edge of fire apparatus access roads or as approved by the fire code official.”

102. Section 508, “Fire Command Center,” of Chapter 5, “Fire Service Features,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“SECTION 508 FIRE COMMAND CENTER

508.1 General. Where required by other sections of this code and in all buildings classified as high-rise buildings by the Dallas [~~International~~] *Building Code* and in all F-1 and S-1 occupancies with a building footprint greater than 500,000 square feet (46 452 m²), a *fire command center* for fire department operations shall be provided and shall comply with Sections 508.1.1 through 508.1.7.

508.1.1 Location and access. The location and access to the *fire command center* shall be in reasonable proximity to the main entry, elevator lobby, including fire service access elevator lobbies and the associated stairwell or *approved* by the fire code official.

508.1.2 Separation. The *fire command center* shall be separated from the remainder of the building by not less than a 1-hour *fire barrier* constructed in accordance with Section 707 of the Dallas [~~International~~] *Building Code* or *horizontal assembly* constructed in accordance with Section 711 of the Dallas [~~International~~] *Building Code*, or both.

508.1.3 Size. The *fire command center* shall be not less than 0.015 percent of the total building area of the facility served or 200 square feet (19 m²) in area, whichever is greater, with a minimum dimension of 0.7 times the square root of the room area or 10 feet (3048 mm), whichever is greater.

Where a *fire command center* is required for Group F-1 and S-1 occupancies with a building footprint greater than 500,000 square feet (46 452 m²) the *fire command center* shall have a minimum size of 96 square feet (9 m²) with a minimum dimension of 8 feet (2438 mm) where *approved* by the fire code official.

508.1.4 Layout approval. A layout of the *fire command center* and all features required by this section to be contained therein shall be submitted for approval prior to installation.

508.1.5 Storage. Storage unrelated to operation of the *fire command center* shall be prohibited.

508.1.6 Required features. The *fire command center* shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system control unit.
2. The fire department communications system, when approved by the *fire code official*.
3. Fire detection and alarm system annunciator.
4. Annunciator unit visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air-distribution systems if mechanical air-handling equipment is used for smoke removal purposes in accordance with Section 403.4.6 of the *Dallas Building Code*.
6. The fire-fighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking *interior exit stairway* doors simultaneously.
8. Sprinkler valve and water-flow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Schematic building plans indicating the typical floor plan and detailing the building core, *means of egress*, *fire protection systems*, fire-fighter air-replenishment systems, fire-fighting equipment and fire department access, and the location of *fire walls*, *fire barriers*, *fire partitions*, *smoke barriers* and smoke partitions.
13. An *approved* Building Information Card that includes, but is not limited to, the following information:

- 13.1. General building information that includes: property name, address, the number of floors in the building above and below grade, use and occupancy classification (for mixed uses, identify the different types of occupancies on each floor), estimated building population during the day, night and weekend.
- 13.2. Building emergency contact information that includes: a list of the building's emergency contacts including but not limited to building manager, building engineer and their respective work phone number, cell phone number, and e-mail address.
- 13.3. Building construction information that includes: the type of building construction including but not limited to floors, walls, columns, and roof assembly.
- 13.4. *Exit access stairway* and *exit stairway* information that includes: number of *exit access stairways* and *exit stairways* in the building, each *exit access stairway* and *exit stairway* designation and floors served, location where each *exit access stairway* and *exit stairway* discharges, *interior exit stairways* that are pressurized, *exit stairways* provided with emergency lighting, each *exit stairway* that allows reentry, *exit stairways* providing roof access; elevator information that includes: number of elevator banks, elevator bank designation, elevator car numbers and respective floors that they serve; location of elevator machine rooms, control rooms and control spaces; location of sky lobby; and location of freight elevator banks.
- 13.5. Building services and system information that includes: location of mechanical rooms, location of building management system, location and capacity of all fuel oil tanks, location of emergency generator, and location of natural gas service.
- 13.6. *Fire protection system* information that includes: locations of standpipes, location of fire pump room, location of fire department connections, floors protected by automatic sprinklers and location of different types of *automatic sprinkler systems* installed including but not limited to dry, wet, and pre-action.
- 13.7. Hazardous material information that includes: location and quantity of hazardous material.
14. Work table.
15. Generator supervision devices, manual start and transfer features.
16. Public address system, where specifically required by other sections of this code.
17. Elevator fire recall switch in accordance with ASME A17.1/CSA B44.

18. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided.

508.1.7 Fire command center identification. The *fire command center* shall be identified by a permanent, easily visible sign stating "FIRE COMMAND CENTER" located on the door to the *fire command center*."

103. Subsection 509.1, "Identification," of Section 509, "Fire Protection and Utility Equipment Identification and Access" of Chapter 5, "Fire Service Features", of Part III, "Building and Equipment Design Features," of the 2021 International Fire Code is amended by adding Subsection 509.1.2, "Sign Requirements," 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."

104. Subsection 510.1, "Emergency Responder Communication Coverage In New Buildings," of Section 510, "Emergency Responder Radio Coverage" of Chapter 5, "Fire Service Features", of Part III, "Building and Equipment Design Features," of the 2021 International Fire Code is amended to read as follows:

"510.1 Emergency responder communication coverage in new buildings. *Approved* in-building, two-way emergency responder communication coverage for emergency responders shall be provided in all new buildings. In-building, two-way emergency responder communication coverage within the building shall be based on the existing coverage levels of the public safety communication systems utilized by the jurisdiction, measured at the exterior of the building. This section shall not require improvement of the existing public safety communication systems.

Exceptions:

1. Where *approved* by the building official and the *fire code official*, a wired communication system in accordance with Section 907.2.13.2 shall be permitted to be installed or maintained instead of an *approved* radio coverage system.
2. Where it is determined by the *fire code official* that the radio coverage system is not needed. A sealed report from a design professional shall be submitted to the *fire code official* for review.

3. In facilities where emergency responder radio coverage is required and such systems, components or equipment required could have a negative impact on the normal operations of that facility, the *fire code official* shall have the authority to accept an automatically activated emergency responder radio coverage system.”

510.1.2 Plan submittal and fees. Plans submittal and fees for Emergency Responder Radio Coverage Systems shall be in accordance with the *Dallas Building Code*.”

105. Subsection 604.1, “General,” of Section 604, “Elevator Operation, Maintenance and Fire Service Keys,” of Chapter 6, “Building Services and Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding a new Paragraph 604.1.1, “Inspections,” to read as follows:

“604.1.1 Inspections. New and existing elevator equipment shall be inspected and tested annually by inspectors licensed by the State of Texas to determine its safety and compliance with ASME A17.1 and ASME A17.3. The building owner shall display the current certificate of compliance in an approved location.”

106. Subsection 605.4, “Fuel Oil Storage Systems,” of Section 605, “Fuel-Fired Appliances,” of Chapter 6, “Building Services and Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended as follows:

“605.4 Fuel oil storage systems. Fuel oil storage systems [~~for building heating 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 *Dallas* [~~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~~[ø]~~ 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.

605.4.2.3 Restricted use and connection. Tanks installed in accordance with Section 605.4.2 shall be used only to supply fuel oil to fuel-burning equipment, generators or fire pumps installed in accordance with Section 605.4.2.5. Connections between tanks and equipment supplied by such tanks shall be made using closed piping systems in accordance with the Dallas~~[International]~~ *Mechanical Code*.

605.4.2.4 Applicability of maximum allowable quantity and area requirements. The quantity of *combustible liquid* stored in tanks comply with Section 605.4.2 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*.

605.4.2.5 Installation. Tanks and piping systems shall be installed in accordance with Section 915 and Chapter 13, both of the Dallas~~[International]~~ *Mechanical Code*, as applicable.

605.4.2.6 Separation. Rooms containing fuel oil tanks for internal combustion engines shall be separated from the remainder of the building by *fire barriers*, *horizontal assemblies*, or both, with a minimum 1-hour *fire resistance rating* with 1-hour fire-protection-rated *opening protectives* constructed in accordance with the Dallas~~[International]~~ *Building Code*.

Exception: Rooms containing protected above-ground tanks complying with Section 5704.2.9.7 shall not be required to be separated from surrounding areas.

605.4.2.7 Spill containment. Tanks exceeding 60-gallon (227 L) capacity or an aggregate capacity of 1,000 gallons (3785 L) that are not provided with integral secondary containment shall be provided with spill containment sized to contain a release from the largest tank.

605.4.2.8 Tanks in basements. Tanks in *basements* shall be located not more than two stories below *grade plane*.

605.4.3 Underground storage of fuel oil. The storage of fuel oil in underground storage tanks shall comply with UL 58 or UL 1316 and be installed in accordance with NFPA 31.”

107. Subparagraph 807.5.2.2, “Artwork In Corridors,” of Paragraph 807.5.2, “Group E,” of Subsection 807.5, “Occupancy-Based Requirements,” of Section 807, “Decorative Materials and Artificial Decorative Vegetation in New and Existing Buildings,” of Chapter 8, “Interior Finish, Decorative Materials and Furnishings,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended 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.”

108. Subparagraph 807.5.2.3, “Artwork In Classrooms,” of Paragraph 807.5.2, “Group E,” of Subsection 807.5, “Occupancy-Based Requirements,” of Section 807, “Decorative Materials and Artificial Decorative Vegetation in New and Existing Buildings,” of Chapter 8, “Interior Finish, Decorative Materials and Furnishings,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“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.”

109. Subparagraph 807.5.5.2, “Artwork In Corridors,” of Paragraph 807.5.5, “Group I-4,” of Subsection 807.5, “Occupancy-Based Requirements,” of Section 807, “Decorative Materials and Artificial Decorative Vegetation in New and Existing Buildings,” of Chapter 8, “Interior Finish, Decorative Materials and Furnishings,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended 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.”

110. Subparagraph 807.5.5.3, “Artwork In Classrooms,” of Paragraph 807.5.5, “Group I-4,” of Subsection 807.5, “Occupancy-Based Requirements,” of Section 807, “Decorative Materials and Artificial Decorative Vegetation in New and Existing Buildings,” of Chapter 8, “Interior Finish, Decorative Materials, and Furnishings,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“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.”

111. Subsection 901.3, “Permits,” of Section 901, “General,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of

the 2021 International Fire Code is amended by adding a new Paragraph 901.3.1, “Plan Review Fees,” to read as follows:

“901.3.1 Plan review fees. Plan review fees for fire alarm systems shall be in accordance with the *Dallas Building Code*.”

112. Paragraph 901.4.1, “Required Fire Protection and Life Safety Systems,” of Subsection 901.4, “Fire Protection and Life Safety Systems,” of Section 901, “General,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“901.4.1 Required fire protection and life safety systems. *Fire protection and life safety systems* required by this code or the *Dallas* [~~*International*~~] *Building Code* shall be installed, repaired, operated, tested and maintained in accordance with this code and nationally recognized standards. A *fire protection* or *life safety system* for which a design option, exception or reduction to the provisions of this code or the *Dallas* [~~*International*~~] *Building Code* has been granted shall be considered to be a required system.”

113. Paragraph 901.4.2, “Nonrequired Fire Protection and Life Safety Systems,” of Subsection 901.4, “Fire Protection and Life Safety Systems,” of Section 901, “General,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“901.4.2 Nonrequired fire protection systems. *Fire protection and life safety systems* [~~or portion thereof~~] not required by this code or the *Dallas* [~~*International*~~] *Building Code* shall be allowed to be furnished for [~~partial or complete~~] protection provided that such installed systems meet the applicable requirements of this code and the *Dallas* [~~*International*~~] *Building Code*.”

114. Paragraph 901.4.4, “Fire Areas,” of Subsection 901.4, “Fire Protection and Life Safety Systems,” of Section 901, “General,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“901.4.4 Fire areas. Where buildings, or portions thereof, are divided into *fire areas* so as not to exceed the limits and/or occupant load established for requiring a *fire protection*

system in accordance with this chapter, such *fire areas* shall be separated by *fire barriers* constructed in accordance with Section 707 of the Dallas [~~International~~] *Building Code* or *horizontal assemblies* constructed in accordance with Section 711 of the Dallas [~~International~~] *Building Code*, or both, having a *fire-resistance rating* of not less than that determined in accordance with Section 707.3.10 of the Dallas [~~International~~] *Building Code*.”

115. Subsection 901.5, “Installation Acceptance Testing,” of Section 901, “General,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“901.5 Installation acceptance testing. *Fire protection and life safety systems* and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as *approved* by the *fire code official*. The *fire code official* shall witness [~~be notified before~~] any required acceptance testing. A retest fee shall be assessed when the testing of the system and/or appurtenances thereto fails after the contractor has acknowledged that the system has been pre-tested and is in an approved condition. The retest fee shall be \$399.00.

901.5.1 Occupancy. It shall be unlawful to occupy any portion of a building or structure until the required *fire protection and life safety systems* have been tested and *approved*.”

116. Paragraph 901.6.1, “Standards,” of Subsection 901.6, “Inspection, Testing and Maintenance,” of Section 901, “General,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding new Subparagraph 901.6.1.1, “Standpipe Testing,” to read as follows:

“901.6.1.1 Standpipe testing. Building owners/managers shall utilize a licensed fire protection contractor to test and certify standpipe systems. In addition to the testing and maintenance requirements of NFPA 25 applying to standpipe systems, 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 hydrostatically tested for all FDCs 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 contractor shall

connect a hose from a fire hydrant or portable pumping system (as approved by the fire code official) to each FDC, and flow water (at an approved rate and pressure) through the standpipe system to the roof outlet to verify that each inlet connection functions properly. 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.
4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDCs.
5. Upon successful completion of standpipe test, the contractor shall place an appropriate service tag as per the State of Texas provisions.
6. The contractor shall follow the procedures required by the State of Texas with regard to appropriate tags denoting noncompliance, impairment or any deficiencies noted during the testing, including the required notification of the local authority having jurisdiction.
7. Additionally, records of the testing shall be maintained by the owner and contractor, as required by the State of Texas 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 nighttime freezing conditions.”

117. Subsection 901.6, “Inspection, Testing and Maintenance,” of Section 901, “General,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding Paragraph 901.6.4, “False Alarms and Nuisance Alarms,” 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.”

118. Subsection 901.7, “Systems Out of Service,” of Section 901, “General,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“901.7 Systems out of service. Where a required *fire protection system* is out of service, or in the event of an excessive number of accidental activations, the fire department and the *fire code official* shall be notified immediately and, where required by the *fire code official*, the building shall be either evacuated or *standby personnel* ~~[an approved fire watch]~~ shall be provided for all occupants left unprotected ~~[by the shutdown]~~ until the *fire protection system* has been returned to service.

Where utilized, *standby personnel* ~~[fire watches]~~ shall be provided with not less than one *approved* means for notification of the fire department and their only duty shall be to perform ~~[constant]~~ patrols of the protected premises and keep watch for fires.

~~[Exception: Facilities with an approved notification and impairment management program. The notification and impairment program for water-based fire protection systems shall comply with NFPA 25.]~~

901.7.1 Impairment coordinator. The building *owner* shall assign an impairment coordinator to comply with the requirements of this section. In the absence of a specific designee, the *owner* shall be considered to be the impairment coordinator.

901.7.2 Tag required. A tag shall be used to indicate that a system, or portion thereof, has been removed from service.

901.7.3 Placement of tag. The tag shall be posted at each fire department connection, system control valve, fire alarm control unit, fire alarm annunciator and *fire command center*, indicating which system, or part thereof, has been removed from service. The *fire code official* shall specify where the tag is to be placed.

901.7.4 Preplanned impairment programs. Preplanned impairments shall be authorized by the impairment coordinator. Before authorization is given, a designated individual shall be responsible for verifying that all of the following procedures have been implemented:

1. The extent and expected duration of the impairment have been determined.
2. The areas or buildings involved have been inspected and the increased risks determined.
3. Recommendations have been submitted to management or the building *owner/manager*.
4. The fire department has been notified.
5. The insurance carrier, the alarm company, the building *owner/manager* and other authorities having jurisdiction have been notified.
6. The supervisors in the areas to be affected have been notified.

7. A tag impairment system has been implemented.
8. Necessary tools and materials have been assembled on the impairment site.

901.7.5 Emergency impairments. Where unplanned impairments occur, appropriate emergency action shall be taken to minimize potential injury and damage. The impairment coordinator shall implement the steps outlined in Section 901.7.4.

901.7.6 Restoring systems to service. Where impaired equipment is restored to normal working order, the impairment coordinator shall verify that all of the following procedures have been implemented:

1. Necessary inspections and tests have been conducted in the presence of the fire code official, if required, to verify that affected systems are operational.
2. Supervisors have been advised that protection is restored.
3. The fire department has been advised that protection is restored.
4. The building *owner*/manager, insurance carrier, alarm company and other involved parties have been advised that protection is restored.
5. All ~~The~~ impairment tags have ~~has~~ been removed.”

119. Section 901, “General,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding new Subsection 901.11, “Auxiliary Equipment,” to read as follows:

“901.11 Auxiliary equipment. Auxiliary equipment installed to meet the manufacturer’s recommended requirements or the installation standards, shall be monitored for circuit integrity. This includes but is not limited to heating devices and air compressors.”

120. Subsection 903.1.1, “Alternative Protection,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in addition to ~~[instead of]~~ automatic sprinkler protection where recognized by the applicable standard, or as ~~[and]~~ *approved* by the *fire code official*.”

121. Subsection 903.2, “Where Required,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“903.2 Where required. *Approved automatic sprinkler systems* in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. Automatic sprinklers shall not be installed in elevator machine rooms, elevator machine spaces and elevator 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.””

~~[Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1 hour fire barriers constructed in accordance with Section 707 of the International Building Code or not less than 2 hour horizontal assemblies constructed in accordance with Section 711 of the International Building Code, or both.]~~

903.2.1 Group A. An *automatic sprinkler system* shall be provided throughout buildings and portions thereof used as Group A occupancies as provided in this section.

903.2.1.1 Group A-1. An *automatic sprinkler system* shall be provided throughout stories containing Group A-1 occupancies and throughout all stories from the Group A-1 occupancy to and including the *levels of exit discharge* serving that occupancy where one of the following conditions exists:

1. The *fire area* exceeds 12,000 square feet (1115 m²).
2. The *fire area* has an *occupant load* of 300 or more.
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.
4. The *fire area* contains a multiple-theater complex.

903.2.1.2 Group A-2. An *automatic sprinkler system* shall be provided throughout stories containing Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the *levels of exit discharge* serving that occupancy where one of the following conditions exists:

1. The *fire area* exceeds 5,000 square feet (464 m²).
2. The *fire area* has an *occupant load* of 100 or more.
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

903.2.1.3 Group A-3. An *automatic sprinkler system* shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including the *levels of exit discharge* serving that occupancy where one of the following conditions exists:

1. The *fire area* exceeds 12,000 square feet (1115 m²).
2. The *fire area* has an *occupant load* of 300 or more.
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

903.2.1.4 Group A-4. An *automatic sprinkler system* shall be provided throughout stories containing Group A-4 occupancies and throughout all stories from the Group A-4 occupancy to and including the *levels of exit discharge* serving that occupancy where one of the following conditions exists:

1. The *fire area* exceeds 12,000 square feet (1115 m²).
2. The *fire area* has an *occupant load* of 300 or more.
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

903.2.1.5 Group A-5. An *automatic sprinkler system* shall be provided for all enclosed Group A-5 accessory use areas in excess of 1,000 square feet (93 m²).

903.2.1.5.1 Spaces under grandstands or bleachers. Enclosed spaces under *grandstands* or *bleachers* shall be equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1 where either of the following exist:

1. The enclosed area is 1,000 square feet (93 m²) or less and is not constructed in accordance with Section 1030.1.1.1.
2. The enclosed area exceeds 1,000 square feet (93 m²).

903.2.1.6 Assembly occupancies on roofs. Where an occupied roof has an assembly occupancy with an *occupant load* exceeding 100 for Group A-2 and 300 for other Group A occupancies, all floors between the occupied roof and the *level of exit discharge* shall

be equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.1.2.

Exception: Open parking garages of Type I or Type II construction.

903.2.1.7 Multiple fire areas. An *automatic sprinkler system* shall be provided where multiple *fire areas* of Group A-1, A-2, A-3 or A-4 occupancies share *exit* or *exit access* components and the combined *occupant load* of these *fire areas* is 300 or more.

903.2.2 Ambulatory care facilities. An *automatic sprinkler system* shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self-preservation.
2. One or more care recipients that are incapable of self-preservation are located at other than the *level of exit discharge* serving such a facility.

In buildings where ambulatory care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* shall be installed throughout the entire floor as well as all floors below where such care is provided, and all floors between the level of ambulatory care and the nearest *level of exit discharge*, the *level of exit discharge*, and all floors below the *level of exit discharge*.

Exception: Floors classified as an open parking garage are not required to be sprinklered.

903.2.3 Group E. An *automatic sprinkler system* shall be provided for Group E occupancies as follows:

1. Throughout all Group E *fire areas* greater than 12,000 square feet (1115 m²) in area.
2. The Group E *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

Exception: In buildings where every classroom has not fewer than one exterior exit door at ground level, an *automatic sprinkler system* is not required in any area below the lowest *level of exit discharge* serving that area.

3. The Group E *fire area* has an *occupant load* of 300 or more.

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

1. A Group F-1 *fire area* exceeds 12,000 square feet (1115 m²).

2. A Group F-1 *fire area* is located more than three stories above *grade plane*.
3. The combined area of all Group F-1 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).

903.2.4.1 Woodworking operations. An *automatic sprinkler system* shall be provided throughout all Group F-1 occupancy *fire areas* that contain woodworking operations in excess of 2,500 square feet (232 m²) in area that generate finely divided combustible waste or use finely divided combustible materials.

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.

903.2.4.3 Group F-1 upholstered furniture or mattresses. An *automatic sprinkler system* shall be provided throughout a Group F-1 *fire area* that exceeds 2,500 square feet (232 m²) used for the manufacture of upholstered furniture or mattresses.

903.2.5 Group H. *Automatic sprinkler systems* shall be provided in high-hazard occupancies as required in Sections 903.2.5.1 through 903.2.5.3.

903.2.5.1 General. An *automatic sprinkler system* shall be installed in Group H occupancies.

903.2.5.2 Group H-5 occupancies. An *automatic sprinkler system* shall be installed throughout buildings containing Group H-5 occupancies. The design of the sprinkler system shall be not less than that required under the Dallas~~[International]~~ *Building Code* for the occupancy hazard classifications in accordance with Table 903.2.5.2.

Where the design area of the sprinkler system consists of a *corridor* protected by one row of sprinklers, the maximum number of sprinklers required to be calculated is 13.

**TABLE 903.2.5.2
GROUP H-5 SPRINKLER DESIGN CRITERIA**

LOCATION	OCCUPANCY HAZARD CLASSIFICATION
Fabrication areas	Ordinary Hazard Group 2
Service corridors	Ordinary Hazard Group 2
Storage rooms without dispensing	Ordinary Hazard Group 2

Storage rooms with dispensing	Extra Hazard Group 2
Corridors	Ordinary Hazard Group 2

903.2.5.3 Pyroxylin plastics. An *automatic sprinkler system* shall be provided in buildings, or portions thereof, where cellulose nitrate film or pyroxylin plastics are manufactured, stored or handled in quantities exceeding 100 pounds (45 kg).

903.2.6 Group I. An *automatic sprinkler system* shall be provided throughout buildings with a Group I *fire area*.

Exceptions:

1. An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1, Condition 1 facilities.
2. An *automatic sprinkler system* is not required where Group I-4 day care facilities are at the *level of exit discharge* and where every room where care is provided has not fewer than one exterior *exit* door.
3. In buildings where Group I-4 day care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the *level of exit discharge* and all floors below the *level of exit discharge* other than areas classified as an open parking garage.

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

1. A Group M *fire area* exceeds 12,000 square feet (1115 m²).
2. A Group M *fire area* is located more than three stories above *grade plane*.
3. The combined area of all Group M *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).

903.2.7.1 High-piled storage. An *automatic sprinkler system* shall be provided as required in Chapter 32 in all buildings of Group M where storage of merchandise is in high-piled or rack storage arrays.

903.2.7.2 Group M upholstered furniture or mattresses. An *automatic sprinkler system* shall be provided throughout a Group M *fire area* where the area used for the

display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m²).

903.2.8 Group R. An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*.

903.2.8.1 Group R-3. An *automatic sprinkler system* shall be installed in accordance with NFPA 13, 13R and/or 13D when required by this code [~~Section 903.3.1.3 shall be permitted in Group R-3~~].

903.2.8.1.1 Additional required suppression systems. An approved automatic sprinkler system shall be installed throughout dwellings in which the total unsprinklered building area exceeds 7,500 square feet (697 m²).

Exceptions:

1. Dwellings that are separated into fire areas no greater than 7,500 square feet (697 m²) by the use of 2-hour rated fire walls. Horizontal assemblies shall not be used to satisfy this requirement.
2. The floor area of an existing nonsprinklered dwelling greater than 7,500 square feet (697 m²) and not housing a Group H occupancy may be increased by not more than 1,000 square feet (93 m²). Not more than one increase in floor area shall be permitted under this exception.

903.2.8.1.2 Draftstop requirements. Draftstopping shall be installed in attics and concealed roof spaces, such that any horizontal area does not exceed 3,000 square feet (278.7 m²).

Exception: Draftstopping is not required in dwellings equipped throughout with an automatic sprinkler system, provided that automatic sprinklers are also installed in the combustible concealed spaces.

903.2.8.2 Group R-4, Condition 1. An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be permitted in Group R-4, Condition 1 occupancies.

903.2.8.3 Group R-4, Condition 2. An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group R-4, Condition 2 occupancies.

903.2.8.4 Care facilities. An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be permitted in care facilities with five or fewer individuals in a single-family *dwelling*.

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

1. A Group S-1 *fire area* exceeds 12,000 square feet (1115 m²).
2. A Group S-1 *fire area* is located more than three stories above *grade plane*.
3. The combined area of all Group S-1 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
4. A Group S-1 *fire area* used for the storage of commercial motor vehicles where the *fire area* exceeds 5,000 square feet (464 m²).

903.2.9.1 Repair garages. An *automatic sprinkler system* shall be provided throughout all buildings used as repair garages in accordance with Section 406.8 of the Dallas~~[International]~~ *Building Code*, as shown:

1. Buildings having two or more stories above *grade plane*, including *basements*, with a *fire area* containing a repair garage exceeding 10,000 square feet (929 m²).
2. Buildings not more than one story above *grade plane*, with a *fire area* containing a repair garage exceeding 12,000 square feet (1115 m²).
3. Buildings with repair garages servicing vehicles parked in *basements*.
4. A Group S-1 *fire area* used for the repair of commercial motor vehicles where the *fire area* exceeds 5,000 square feet (464 m²).

903.2.9.2 Bulk storage of tires. Buildings and structures where the area for the storage of tires exceeds 20,000 cubic feet (566 m³) shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

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.

903.2.9.4 Group S-1 upholstered furniture and mattresses. An *automatic sprinkler system* shall be provided throughout a Group S-1 *fire area* where the area used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).

Exception: Self-service storage facilities not greater than one story above grade plane where all storage spaces can be accessed directly from the exterior.

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

903.2.10 Group S-2 parking garages. *An automatic sprinkler system shall be provided throughout buildings classified as parking garages where any of the following conditions exist:*

1. Where the *fire area* of the enclosed parking garage, in accordance with Section 406.6 of the *Dallas*~~*International*~~ *Building Code*, exceeds 12,000 square feet (1115 m²).
2. Where the enclosed parking garage, in accordance with Section 406.6 of the *Dallas*~~*International*~~ *Building Code*, is located beneath other groups.

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

3. Where the *fire area* of the open parking garage, in accordance with Section 406.5 of the *Dallas*~~*International*~~ *Building Code*, exceeds 48,000 square feet (4460 m²).

903.2.10.1 Commercial parking garages. *An automatic sprinkler system shall be provided throughout buildings used for storage of commercial motor vehicles where the *fire area* exceeds 5,000 square feet (464 m²).*

903.2.10.2 Mechanical-access enclosed parking garages. *An approved automatic sprinkler system shall be provided throughout buildings used for the storage of motor vehicles in a mechanical-access enclosed parking garage. The portion of the building that contains the mechanical-access enclosed parking garage shall be protected with a specially engineered automatic sprinkler system.*

903.2.11 Specific buildings areas and hazards. *In all occupancies other than Group U, an automatic sprinkler system shall be installed for building design or hazards in the locations set forth in Sections 903.2.11.1 through 903.2.11.6.*

903.2.11.1 Stories without openings. *An automatic sprinkler system shall be installed throughout all *stories*, including *basements*, of all buildings where the floor area exceeds 1,500 square feet (139 m²) and where the story does not comply with the following criteria for exterior wall openings:*

1. Openings below grade that lead directly to ground level by an exterior *stairway* complying with Section 1011 or an outside *ramp* complying with Section 1012. Openings shall be located in each 50 linear feet (15 240 mm), or fraction thereof, of *exterior wall* in the story on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm).

2. Openings entirely above the adjoining ground level totaling not less than 20 square feet (1.86 m²) in each 50 linear feet (15 240 mm), or fraction thereof, of *exterior wall* in the story on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm). The height of the bottom of the clear opening shall not exceed 44 inches (1118 mm) measured from the floor.

903.2.11.1.1 Opening dimensions and access. Openings shall have a minimum dimension of not less than 30 inches (762 mm). *Access* to such openings shall be provided for the fire department from the exterior and shall not be obstructed in a manner such that fire fighting or rescue cannot be accomplished from the exterior.

903.2.11.1.2 Openings on one side only. Where openings in a story are provided on only one side and the opposite wall of such story is more than 75 feet (22 860 mm) from such openings, the story shall be equipped throughout with an *approved automatic sprinkler system*, or openings shall be provided on not fewer than two sides of the story.

903.2.11.1.3 Basements. Where any portion of a *basement* is located more than 75 feet (22 860 mm) from openings required by Section 903.2.11.1, or where walls, partitions or other obstructions are installed that restrict the application of water from hose streams, the *basement* shall be equipped throughout with an *approved automatic sprinkler system*.

903.2.11.2 Rubbish and linen chutes. An *automatic sprinkler system* shall be installed at the top of rubbish and linen chutes and in their terminal rooms. Chutes shall have additional sprinkler heads installed at alternate floors and at the lowest intake. Where a rubbish chute extends through a building more than one floor below the lowest intake, the extension shall have sprinklers installed that are recessed from the drop area of the chute and protected from freezing in accordance with Section 903.3.1.1. Such sprinklers shall be installed at alternate floors, beginning with the second level below the last intake and ending with the floor above the discharge. *Access* to sprinklers in chutes shall be provided for servicing.

903.2.11.3 Buildings 55 feet or more in height. An *automatic sprinkler system* shall be installed throughout buildings that have one or more stories with an *occupant load* of 30 or more, other than penthouses in compliance with Section 1511 of the *Dallas Building Code*, located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exception: Open parking structures in compliance with Section 406.5 of the *Dallas Building Code*, having no other occupancies above the subject garage. [~~Occupancies in Group F-2.~~]

903.2.11.4 Ducts conveying hazardous exhausts. Where required by the *Dallas*~~[International]~~ *Mechanical Code*, automatic sprinklers shall be provided in ducts conveying hazardous exhaust or flammable or combustible materials.

Exception: Ducts where the largest cross-sectional diameter of the duct is less than 10 inches (254 mm).

903.2.11.5 Commercial cooking operations. An *automatic sprinkler system* shall be installed in commercial kitchen exhaust hood and duct systems where an *automatic sprinkler system* is used to comply with Section 904.

903.2.11.6 Other required fire protection systems. In addition to the requirements of Section 903.2, the provisions indicated in Table 903.2.11.6 require the installation of a fire protection system for certain buildings and areas.

903.2.11.7 High-piled combustible storage. For any building with a clear height exceeding 12 feet (4572 mm), refer to Chapter 32. Any Group S occupancy exceeding 12,000 square feet (1115 m²) that has a clear height in excess of 12 feet (3658 mm), making it possible to be used for storage in excess of 12 feet (3658 mm) in height, shall be considered to be high-piled storage and shall comply with the provisions of this section. When a specific product cannot be identified, a *fire protection system* shall be installed as for Class IV commodities to the maximum pile height.

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

903.2.12 During construction. *Automatic sprinkler systems* required during construction, *alteration* and demolition operations shall be provided in accordance with Section 3314.

122. Item 903.3.1.1.1, “Exempt Locations,” of Subparagraph 903.3.1.1, “NFPA 13 Sprinkler Systems,” Paragraph 903.3.1, “Standards,” of Subsection 903.3, “Installation Requirements,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

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

1. A room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. A 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. ~~[Rooms or areas that are of noncombustible construction with wholly noncombustible contents.~~

~~[5. Fire service access e]Elevator machine rooms, [and] machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.~~

~~[6. Machine rooms, machinery spaces, control rooms and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008 of the *International Building Code*.]~~”

123. Subparagraph 903.3.1.1, “NFPA 13 Sprinkler Systems,” of Paragraph 903.3.1, “Standards,” of Subsection 903.3, “Installation Requirements,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding Item 903.3.1.1.3, “Residential Systems” to read as follows:

“903.3.1.1.3 Residential systems. Residential sprinkler systems installed in accordance with Sections 903.3.1.2 and 903.3.1.3 shall be recognized for the purposes of exceptions or reductions, commonly referred to as “trade-offs,” only if permitted by other provisions of this code.”

124. Subparagraph 903.3.1.2, “NFPA 13R Sprinkler Systems,” of Paragraph 903.3.1, “Standards,” of Subsection 903.3, “Installation Requirements,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended 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 [30] feet (10,668[9144] mm) or less above the lowest level of fire department vehicle access.
3. The floor level of the lowest story is 35 [30] feet (10,668[9144] mm) or less below the lowest level of fire department vehicle access.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 of the Dallas [~~International~~] *Building Code* shall be measured from *grade plane*.

903.3.1.2.1 Balconies and decks. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of *dwelling units* and *sleeping units* where either of the following conditions exists:

1. The building is of Type V construction, provided that there is a roof or deck above.
2. Exterior balconies, decks and ground floor patios of *dwelling units* and *sleeping units* are constructed in accordance with Section 705.2.3.1, Exception 3 of the Dallas[~~International~~] *Building Code*.

Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25 mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

903.3.1.2.2 Corridors and balconies [~~in the means of egress~~]. Sprinkler protection shall be provided in all *corridors* and for all balconies. [~~in the means of egress where any of the following conditions apply:~~

- ~~1. Corridors with combustible floor or walls.~~
- ~~2. Corridors with an interior change of direction exceeding 45 degrees (0.79 rad).~~
- ~~3. Corridors that are less than 50 percent open to the outside atmosphere at the ends.~~
- ~~4. Open-ended corridors and associated exterior stairways and ramps as specified in Section 1027.6, Exception 3.~~
- ~~5. Egress balconies not complying with Sections 1021.2 and 1021.3.]~~

903.3.1.2.3 Attached garages and attics. Sprinkler [Attie] protection is required in attached garages, and in the following attic spaces [shall be provided as follows]:

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. [Where located in a building of Type III, Type IV or Type V construction designed in accordance with Section 510.2 or 510.4 of the *International Building Code*, attics not required by Item 1 to have sprinklers shall comply with one of the following if the roof assembly is located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access needed to meet the provisions in Section 503:

- ~~3.1. Provide automatic sprinkler system protection.~~
- ~~3.2. Construct the attic using noncombustible materials.~~
- ~~3.3. Construct the attic using fire-retardant treated wood complying with Section 2303.2 of the *International Building Code*.~~
- ~~3.4. Fill the attic with noncombustible insulation.~~

~~The height of the roof assembly shall be determined by measuring the distance from the lowest required fire vehicle access road surface adjacent to the building to the eave of the highest pitched roof, the intersection of the highest~~

~~roof to the exterior wall, or the top of the highest parapet, whichever yields the greatest distance. For the purpose of this measurement, required fire vehicle access roads shall include only those roads that are necessary for compliance with Section 503.]~~

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 Dallas~~[International]~~ *Building Code*.
- 4.5. Fill the attic with noncombustible insulation.

Additional guidance from the *fire code official* can be found in the Fire Code Interpretation, Subject: Attic Fire Protection, Dated May 07, 2021.

125. Subparagraph 903.3.1.3, “NFPA 13D Sprinkler Systems,” of Paragraph 903.3.1, “Standards,” of Subsection 903.3, “Installation Requirements,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

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

126. Paragraph 903.3.1, “Standards,” of Subsection 903.3, “Installation Requirements,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of the 2021 International Fire Code is amended by adding Subparagraph 903.3.1.4, “Freeze protection,” of 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 nonventilated 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,
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.”

127. Paragraph 903.3.5, “Water Supplies,” of Subsection 903.3, “Installation Requirements,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“903.3.5 Water supplies. Water supplies for *automatic sprinkler systems* shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the Dallas [International] Plumbing Code. For connections to public waterworks systems, the water supply test used for design of *fire protection systems* shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as *approved* by the *fire code official*. Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10 psi (69 Pa) safety factor. Where a waterflow test is used for the purposes of system design, the test shall be conducted no more than 12 months prior to working plan submittal unless otherwise approved by the authority having jurisdiction. Refer to Section 507.4 for additional design requirements.

903.3.5.1 Domestic services. Where the domestic service provides the water supply for the *automatic sprinkler system*, the supply shall be in accordance with this section.

903.3.5.2 [Residential e]Combination services. In all NFPA 13 and 13R designs, a[A] single combination water supply shall be allowed provided that the domestic demand is added to the sprinkler demand as required by NFPA 13, 13R and 13D. Combination services 4-inches and larger shall be subject to acceptance tests as contained in the installation standards. Such tests shall be witnessed and approved by the fire code official.

128. Subsection 903.4, “Sprinkler System Supervision and Alarms,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

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

Exceptions:

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

Sprinkler and standpipe system water-flow detectors shall be provided for each standpipe and/or 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.

903.4.1 Monitoring. Alarm, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an *approved* supervising station or, where *approved* by the *fire code official*, shall sound an audible signal at a constantly attended location.

Exception: Backflow prevention device test valves located in limited area sprinkler system supply piping shall be locked in the open position. In occupancies required to be equipped with a fire alarm system, the backflow preventer valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.

903.4.2 Alarms. A weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection [~~An *approved* audible device, located on the exterior of the building in an *approved* location,~~] shall be connected to every [~~each~~] *automatic sprinkler system*. Such sprinkler waterflow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the *automatic sprinkler system* shall actuate the building fire alarm system.

903.4.3 Floor control valves. *Approved* supervised indicating control valves shall be provided at the point of connection to the riser on each floor in high-rise buildings.”

129. Subsection 904.1, “General,” of Section 904, “Alternative Automatic Fire-Extinguishing Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding a new Paragraph 904.1.2, “Separation,” to read as follows:

“904.1.2 Separation. Areas of buildings protected by an automatic fire-extinguishing system shall be separated from unprotected areas by fire barriers complying with Section 707 of the *Dallas Building Code* having a minimum fire-resistance rating of 2 hours.

Exception: Special application, spray booth and kitchen hood suppression systems.”

130. Subsection 905.2, “Installation Standard,” of Section 905, “Standpipe Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended 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 (69 kPa) and a maximum of 40 psig (276 kPa) air pressure with a high/low alarm. Fire department connections for standpipe systems shall be in accordance with Section 912.”

131. Paragraph 905.3.2, “Group A,” of Subsection 905.3, “Required Installations,” of Section 905, “Standpipe Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“905.3.2 Group A. Class I automatic wet standpipes shall be provided in nonsprinklered Group A buildings having an *occupant load* exceeding 1,000 persons.

[Exceptions:

- ~~1. Open air seating spaces without enclosed spaces.~~
- ~~2. Class I automatic dry and semiautomatic dry standpipes or manual wet standpipes are allowed in buildings that are not high rise buildings.]”~~

132. Subsection 905.3, “Required Installations,” of Section 905, “Standpipe Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding a new Paragraph 905.3.9, “Buildings Exceeding 10,000 Square Feet,” to read as follows:

“905.3.9 Buildings exceeding 10,000 square feet. 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 (60 960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

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

133. Subsection 905.4, “Location of Class I Standpipe Hose Connections,” of Section 905, “Standpipe Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required [~~interior~~] *exit stairway*, a hose connection shall be provided for each story above and below *grade plane*. Hose connections shall be located at the main floor landing unless otherwise *approved by the fire code official*.

Exception: A single hose connection shall be permitted to be installed in the open *corridor* or open breezeway between open *stairs* that are not greater than 75 feet (22 860 mm) apart.

2. On each side of the wall adjacent to the *exit* opening of a horizontal *exit*.

Exception: Where floor areas adjacent to a horizontal *exit* are reachable from an [~~interior~~] *exit stairway* hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the horizontal *exit*.

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

Exception: Where floor areas adjacent to an *exit passageway* are reachable from an [~~interior~~] *exit stairway* hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the *exit passageway* to other areas of the building.

4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an *exit passageway* or *exit corridor* to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an *exit passageway* or *exit corridor* to the mall.
5. Where the roof has a slope less than 4 units vertical in 12 units horizontal (33.3- percent slope), each standpipe shall be provided with a two-way hose connection [~~shall be~~]

located to serve the roof or at the highest landing of an [~~interior~~] *exit stairway* with *stair* access to the roof provided in accordance with Section 1011.12.

6. Where the most remote portion of a nonsprinklered floor or story is more than 150 feet (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet (60 960 mm) from a hose connection, the *fire code official* is authorized to require that additional hose connections be provided in *approved* locations.
7. When required by this chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at 200-foot intervals along major corridors thereafter, or as otherwise approved by the fire code official.

905.4.1 Protection. Risers and laterals of Class I standpipe systems not located within an *interior exit stairway* shall be protected by a degree of *fire resistance* equal to that required for vertical enclosures in the building in which they are located.

Exception: In buildings equipped throughout with an *approved automatic sprinkler system*, laterals that are not located within an *interior exit stairway* are not required to be enclosed within fire-resistance-rated construction.

905.4.2 Interconnection. In buildings where more than one standpipe is provided, the standpipes shall be interconnected in accordance with NFPA 14.

905.4.3. Additional requirements. All Class I standpipes shall be:

1. Filled with water at all times; or
2. Supervised with a minimum of 10 psig (69 kPa) air pressure with a high/low alarm."

134. Subsection 905.11, "Locking Standpipe Outlet Caps," of Section 905, "Standpipe Systems," of Chapter 9, Fire Protection and Life Safety Systems," of Part III, "Building and Equipment Design Features," of the 2021 International Fire Code is amended to read as follows:

"905.11 Locking standpipe outlet caps. The *fire code official* is authorized to require locking caps on the outlets on standpipes where the responding fire department carries key wrenches for the removal that are compatible with locking FDC connection caps. 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*."

135. Subsection 906.1, “Where Required,” of Section 906, “Portable Fire Extinguishers,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“906.1 Where required. Portable fire extinguishers shall be installed in all of the following locations:

1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.

Exceptions:

1. In Group R-2 occupancies, portable fire extinguishers shall be required only in locations specified in Items 2 through 6 where each dwelling unit is provided with a portable fire extinguisher having a minimum rating of 1-A:10-B:C.
2. In Group E occupancies, portable fire extinguishers shall be required only in locations specified in Items 2 through 6 where each classroom is provided with a portable fire extinguisher having a minimum rating of 2-A:20-B:C.
- ~~3. In storage areas of Group S occupancies where forklift, powered industrial truck or powered cart operators are the primary occupants, fixed extinguishers, as specified in NFPA 10, shall not be required where in accordance with all of the following:~~
 - ~~3.1 Use of vehicle mounted extinguishers shall be approved by the fire code official.~~
 - ~~3.2 Each vehicle shall be equipped with a 10 pound, 40A:80B:C extinguisher affixed to the vehicle using a mounting bracket approved by the extinguisher manufacturer or the fire code official for vehicular use.~~
 - ~~3.3 Not less than two spare extinguishers of equal or greater rating shall be available on-site to replace a discharged extinguisher.~~
 - ~~3.4 Vehicle operators shall be trained in the proper operation, use and inspection of extinguishers.~~
 - ~~3.5 Inspections of vehicle mounted extinguishers shall be performed daily.]~~
2. Within 30 feet (9144 mm) distance of travel from commercial cooking equipment and from domestic cooking equipment in Group I-1; I-2, Condition 1; and R-2 college dormitory occupancies.

3. In areas where *flammable* or *combustible liquids* are stored, used or dispensed.
4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 3316.1.
5. Where required by the sections indicated in Table 906.1.
6. Special-hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the *fire code official*.

Exception: Portable fire extinguishers are not required at normally unmanned Group U occupancy buildings or structures where a portable fire extinguisher suitable to the hazard of the location is provided on the vehicle of visiting personnel.

TABLE 906.1
ADDITIONAL REQUIRED PORTABLE FIRE EXTINGUISHERS

SECTION	SUBJECT
303.5	Asphalt kettles
307.5	Open burning
308.1.3	Open flames—torches
309.4	Powered industrial trucks
1204.10	Portable generators
2005.2	Aircraft towing vehicles
2005.3	Aircraft welding apparatus
2005.4	Aircraft fuel-servicing tank vehicles
2005.5	Aircraft hydrant fuel-servicing vehicles
2005.6	Aircraft fuel-dispensing stations
2007.7	Heliports and helistops
2108.4	Dry cleaning plants
2305.5	Motor fuel-dispensing facilities
2310.6.4	Marine motor fuel-dispensing facilities
2311.6	Repair garages
2404.4.1	Spray-finishing operations
2405.4.2	Dip-tank operations
2406.4.2	Powder-coating areas
2804.3	Lumberyards/woodworking facilities

2808.8	Recycling facilities
2809.5	Exterior lumber storage
2903.5	Organic-coating areas
3006.3	Industrial ovens
3107.9	Tents and membrane structures
3206.10	High-piled storage
3316.1	Buildings under construction or demolition
3318.3	Roofing operations
3408.2	Tire rebuilding/storage
3504.2.6	Welding and other hot work
3604.4	Marinas
3703.6	Combustible fibers
5703.2.1	Flammable and combustible liquids, general
5704.3.3.1	Indoor storage of flammable and combustible liquids
5704.3.7.5.2	Liquid storage rooms for flammable and combustible liquids
5705.4.9	Solvent distillation units
5706.2.7	Farms and construction sites—flammable and combustible liquids storage
5706.4.10.1	Bulk plants and terminals for flammable and combustible liquids
5706.5.4.5	Commercial, industrial, governmental or manufacturing establishments—fuel dispensing
5706.6.4	Tank vehicles for flammable and combustible liquids
5906.5.7	Flammable solids
6108.2	LP-gas”

136. Subsection 907.1, “General,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“907.1 General. This section covers the application, installation, performance and maintenance of fire alarm systems and their components in new and existing buildings and structures. The

requirements of Section 907.2 are applicable to new buildings and structures. The requirements of Section 907.9 are applicable to existing buildings and structures.

907.1.1 Construction documents. *Construction documents* for fire alarm systems shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code; the Dallas~~International~~ *Building Code*; and relevant laws, ordinances, rules and regulations, as determined by the *fire code official*.

907.1.2 Fire alarm shop drawings. Shop drawings for fire alarm systems shall be prepared in accordance with NFPA 72 and submitted for review and approval prior to system installation.

907.1.2.1 Document retention. With every new system, a documentation cabinet shall be installed at the system control unit or at another approved location at the protected premises. A copy of approved plans shall be stored in the documentation cabinet. If the documentation cabinet is not at the same location as the control unit, its location shall be identified at the system control unit.

907.1.2.2 Labeling. The documentation cabinet shall be prominently labeled SYSTEMS RECORD DOCUMENTS.

907.1.2.3 Security. The contents of the cabinet shall be accessible by authorized personnel only.

907.1.2.4 Contents. System documentation shall include required documents regarding the system design and function and shall be maintained for the life of the system. This includes the record of installation, original or copies of approved plans and a set of the original approved engineer's review notes. Archived records may include a physical copy or an electronic copy, as long as hard copies can be made when required.

907.1.3 Equipment. Systems and components shall be *listed* and *approved* for the purpose for which they are installed. Where such systems are installed, they shall be designed, installed and maintained in accordance with this code and the applicable National Fire Protection Association standards.

907.1.3.1 Prohibited equipment. Smoke generating devices activated by a burglar alarm, motion detector, tamper alarm or other type of intruder alarms are prohibited in all buildings.

907.1.4 Design standards. All new or replaced fire alarm systems, including fire alarm control panel replacements, shall comply with the requirements of Section 907 and shall be addressable and in accordance with Section 907.6.3. Alarm systems utilizing more than 20 alarm initiating devices shall be analog addressable.

Exception: Existing systems need not comply unless the total building or fire alarm system remodel or expansion initiated after the effective date of this code, as adopted, exceeds 30 percent of the building area. When cumulative building remodel or expansion exceeds 50 percent of the building area, all existing systems shall comply within 18 months of permit application. The owner/operator of the facility shall maintain documentation of amount of fire alarm system remodel or expansion. The documentation shall be submitted with each fire alarm system plans submittal and/or upon request from the *fire code official*.

907.1.5 Area separation walls/fire walls. Area separation walls/fire walls shall not be used to reduce or eliminate fire alarm requirements.

Exception: Adjacent spaces shall be considered separate areas for fire alarm purposes if separated by minimum fire-rated construction as required in the *Dallas Building Code* to define separate buildings. Separating walls shall not have openings that permit occupant communication between the spaces.”

137. Subsection 907.2, “Where Required—New Buildings and Structures,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“907.2 Where required—new buildings and structures. An *approved* fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.5, unless other requirements are provided by another section of this code.

Not fewer than one manual fire alarm box shall be provided per building in an *approved* location to initiate a fire alarm signal for fire alarm systems and sprinkler monitoring systems employing automatic fire detectors or water-flow detection devices. Where other sections of this code allow elimination of fire alarm boxes due to sprinklers, a single fire alarm box shall be installed.

Exception[s]:

[1.] The manual fire alarm box is not required for fire alarm systems dedicated to elevator recall control and supervisory service.

~~[2. The manual fire alarm box is not required for Group R-2 occupancies unless required by the *fire code official* to provide a means for fire watch personnel to initiate an alarm during a sprinkler system impairment event. Where provided,~~

~~the manual fire alarm box shall not be located in an area that is accessible to the public.]~~

907.2.1 Group A. A manual fire alarm system and automatic fire detection in paths of egress that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies having an~~[where the]~~ *occupant load of* ~~[due to the assembly occupancy is]~~ 300 or more persons, or where the ~~[Group A]~~ *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 Dallas ~~[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: Manual fire alarm boxes are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1, automatic fire detection in paths of egress, and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

907.2.1.1 System initiation in Group A occupancies with an occupant load of 1,000 or more. Activation of the fire alarm in Group A occupancies with an *occupant load* of 1,000 or more shall initiate a signal using an emergency voice/alarm communications system in accordance with Section 907.5.2.2.

Exception: Where *approved*, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed 3 minutes, for the sole purpose of allowing a live voice announcement from an *approved*, constantly attended location.

907.2.1.2 Emergency voice/alarm communication system captions. Stadiums, arenas and *grandstands* required to caption audible public announcements shall be in accordance with Section 907.5.2.2.4.

907.2.2 Group B. A manual fire alarm system, and automatic fire detection system in paths of egress, which activates the occupant notification system in accordance with Section 907.5, shall be installed in Group B occupancies where one of the following conditions exists:

1. The combined Group B *occupant load* of all floors is 500 or more.
2. The Group B *occupant load* is more than 100 persons above or below the lowest *level of exit discharge*.
3. The *fire area* contains an ambulatory care facility.

Exception: Manual fire alarm boxes and automatic fire detection in paths of egress are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

907.2.2.1 Ambulatory care facilities. *Fire areas* containing ambulatory care facilities shall be provided with an electronically supervised automatic smoke detection system installed within the ambulatory care facility and in public use areas outside of tenant spaces, including public *corridors* and elevator lobbies.

~~[**Exception:** Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 provided the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.]~~

907.2.3 Group E. A manual fire alarm system and automatic fire detection in paths of egress 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. Group E daycare occupancies shall have a smoke detector in all areas used by children. Where *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. Unless separated by a minimum of 100 feet (30 480 mm) of open space, all buildings, whether portable buildings or the main building, will be considered one building for fire alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. A manual fire alarm system with automatic fire detection in paths of egress shall not be required in Group E educational and day care occupancies with an *occupant load* of 30 [50] or when provided with an approved *automatic sprinkler system*.
 - 1.1. Residential in-home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.)
2. Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies with occupant loads of 100 or less, provided that activation of the manual fire alarm system initiates an *approved* occupant notification signal in accordance with Section 907.5.

3. ~~[Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:~~

~~3.1 Interior corridors are protected by smoke detectors.~~

~~3.2 Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat detectors or other approved detection devices.~~

~~3.3 Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.~~

~~3.4 Manual activation is provided from a normally occupied location.~~

- 4.] Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:

3.1.[4.1] The building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.

3.2.[4.2.] The emergency voice/alarm communication system will activate on sprinkler water flow.

3.3.[4.3.] Manual activation is provided from a normally occupied location.

907.2.3.1 Exterior alarm-signaling device. Alarm-signaling device(s) shall be mounted on the exterior of the building in all common use/gathering areas.

907.2.4 Group F. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group F occupancies where both of the following conditions exist:

1. The Group F occupancy is two or more stories in height.
2. The Group F occupancy has a combined *occupant load* of 500 or more above or below the lowest *level of exit discharge*.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

907.2.5 Group H. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group H-5 occupancies and in occupancies used for the manufacture of organic coatings. An automatic smoke detection system shall be installed for highly toxic gases, organic peroxides and oxidizers in accordance with Chapters 60, 62 and 63, respectively.

907.2.6 Group I. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group I occupancies. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be provided in accordance with Sections 907.2.6.1, 907.2.6.2 and 907.2.6.3.3.

Exceptions:

1. Manual fire alarm boxes in *sleeping units* of Group I-1 and I-2 occupancies shall not be required at *exits* if located at all care providers' control stations or other constantly attended staff locations, provided that such manual fire alarm boxes are visible and provided with *ready access*, and the distances of travel required in Section 907.4.2.1 are not exceeded.
2. Occupant notification systems are not required to be activated where private mode signaling installed in accordance with NFPA 72 is *approved* by the *fire code official* and staff evacuation responsibilities are included in the fire safety and evacuation plan required by Section 404.

907.2.6.1 Group I-1. An automatic smoke detection system shall be installed in *corridors*, waiting areas open to *corridors* and *habitable spaces* other than *sleeping units* and kitchens. The system shall be activated in accordance with Section 907.5.

Exceptions:

1. For Group I-1, Condition 1 occupancies, smoke detection in *habitable spaces* is not required where the facility is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1.
2. Smoke detection is not required for exterior balconies.

907.2.6.1.1 Smoke alarms. Single- and multiple-station smoke alarms shall be installed in accordance with Section 907.2.11.

907.2.6.2 Group I-2. An automatic smoke detection system shall be installed in *corridors* in Group I-2, Condition 1 facilities and spaces permitted to be open to the *corridors* by Section 407.2 of the *Dallas[International] Building Code*. The system shall be activated in accordance with Section 907.4. Group I-2, Condition 2 occupancies shall be equipped with an automatic smoke detection system as required in Section 407 of the *Dallas[International] Building Code*.

Exceptions:

1. *Corridor* smoke detection is not required in *smoke compartments* that contain *sleeping units* where such units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the *corridor* side of each *sleeping unit* and shall provide an audible and visual alarm at the care providers' station attending each unit.
2. *Corridor* smoke detection is not required in *smoke compartments* that contain *sleeping units* where *sleeping unit* doors are equipped with automatic door-closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.

907.2.6.3 Group I-3 occupancies. Group I-3 occupancies shall be equipped with a manual fire alarm system and automatic smoke detection system installed for alerting staff.

907.2.6.3.1 System initiation. Actuation of an automatic fire-extinguishing system, *automatic sprinkler system*, a manual fire alarm box or a fire detector shall initiate an *approved* fire alarm signal that automatically notifies staff.

907.2.6.3.2 Manual fire alarm boxes. Manual fire alarm boxes are not required to be located in accordance with Section 907.4.2 where the fire alarm boxes are provided at staff-attended locations having direct supervision over areas where manual fire alarm boxes have been omitted.

907.2.6.3.2.1 Manual fire alarms boxes in detainee areas. Manual fire alarm boxes are allowed to be locked in areas occupied by detainees, provided that staff members are present within the subject area and have keys readily available to operate the manual fire alarm boxes.

907.2.6.3.3 Automatic smoke detection system. An automatic smoke detection system shall be installed throughout resident housing areas, including *sleeping units* and contiguous day rooms, group activity spaces and other common spaces normally open to residents.

Exceptions:

1. Other *approved* smoke detection arrangements providing equivalent protection, including, but not limited to, placing detectors in exhaust ducts from cells or behind protective guards *listed* for the purpose, are allowed where necessary to prevent damage or tampering.

2. *Sleeping units* in Use Conditions 2 and 3 as described in Section 308 of the Dallas~~[International]~~ *Building Code*.
3. Smoke detectors are not required in *sleeping units* with four or fewer occupants in *smoke compartments* that are equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1.

907.2.6.4 Institutional group I-4 day care facilities. A manual fire alarm system and automatic fire detection in paths of egress that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group I-4 day care facility occupancies. Group 1-4 day care occupancies shall have smoke detectors in all areas used by children. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

907.2.7 Group M. A manual fire alarm system and automatic fire detection in paths of egress that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group M occupancies where one of the following conditions exists:

1. The combined Group M *occupant load* of all floors is 500 or more persons.
2. The Group M *occupant load* is more than 100 persons above or below the lowest *level of exit discharge*.

Exceptions:

1. A manual fire alarm system is not required in covered or open mall buildings complying with Section 402 of the Dallas ~~[International]~~ *Building Code*.
2. Manual fire alarm boxes and automatic fire detection in paths of egress are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 and the occupant notification appliances will automatically activate throughout the notification zones upon sprinkler water flow.

907.2.7.1 Occupant notification. During times that the building is occupied, the initiation of a signal from a manual fire alarm box, ~~[or from]~~ a waterflow switch or automatic fire detection system shall not be required to activate the alarm notification appliances when an alarm signal is activated at a constantly attended location from which evacuation instructions shall be initiated over an emergency voice/alarm communication system installed in accordance with Section 907.5.2.2.

907.2.8 Group R-1. Fire alarm systems and smoke alarms shall be installed in Group R-1 occupancies as required in Sections 907.2.8.1 through 907.2.8.3.

907.2.8.1 Manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-1 occupancies.

Exceptions:

1. A manual fire alarm system is not required in buildings not more than two stories in height where all individual *sleeping units* and contiguous attic and crawl spaces to those units are separated from each other and public or common areas by not less than 1-hour *fire partitions* and each individual *sleeping unit* has an *exit* directly to a *public way*, *egress court* or yard.
2. Manual fire alarm boxes are not required throughout the building where all of the following conditions are met:
 - 2.1 The building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2.
 - 2.2 The notification appliances will activate upon sprinkler water flow.
 - 2.3 Not fewer than one manual fire alarm box is installed at an *approved* location.

907.2.8.2 Automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed throughout all interior *corridors* serving *sleeping units*.

Exception: An automatic smoke detection system is not required in buildings that do not have interior *corridors* serving *sleeping units* and where each *sleeping unit* has a *means of egress* door opening directly to an *exit* or to an exterior *exit access* that leads directly to an *exit*.

907.2.8.3 Smoke alarms. Single- and multiple-station smoke alarms shall be installed in accordance with Section 907.2.11.

907.2.9 Group R-2. Fire alarm systems and smoke alarms shall be installed in Group R-2 occupancies as required in Sections 907.2.9.1 and 907.2.9.3.

907.2.9.1 Manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 occupancies where any of the following conditions apply:

1. Any *dwelling unit* or *sleeping unit* is located three or more stories above the lowest level of exit discharge.
2. Any *dwelling unit* or *sleeping unit* is located more than one story below the highest level of exit discharge of exits serving the *dwelling unit* or *sleeping unit*.
3. The building contains more than 16 *dwelling units* or *sleeping units*.

Exceptions:

1. A fire alarm system is not required in buildings not more than two stories in height where all *dwelling units* or *sleeping units* and contiguous attic and crawl spaces are separated from each other and public or common areas by not less than 1-hour *fire partitions* and each *dwelling unit* or *sleeping unit* has an *exit* directly to a *public way*, *egress court* or *yard*.
2. Manual fire alarm boxes are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2 and the occupant notification appliances will automatically activate throughout the notification zones upon a sprinkler water flow.
3. A fire alarm system is not required in buildings that do not have interior *corridors* serving *dwelling units* and are protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that *dwelling units* either have a *means of egress* door opening directly to an exterior *exit access* that leads directly to the *exits* or are served by open-ended *corridors* designed in accordance with Section 1027.6, Exception 3.

907.2.9.2 Smoke alarms. Single- and multiple-station smoke alarms shall be installed in accordance with Section 907.2.11.

907.2.9.3 Group R-2 college and university buildings. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 occupancies operated by a college or university for student or staff housing in all of the following locations:

1. Common spaces outside of *dwelling units* and *sleeping units*.
2. Laundry rooms, mechanical equipment rooms and storage rooms.

3. All interior *corridors* serving *sleeping units* or *dwelling units*.

Exception: An automatic smoke detection system is not required in buildings that do not have interior *corridors* serving *sleeping units* or *dwelling units* and where each *sleeping unit* or *dwelling unit* either has a *means of egress* door opening directly to an exterior *exit access* that leads directly to an *exit* or a *means of egress* door opening directly to an *exit*.

Required smoke alarms in *dwelling units* and *sleeping units* in Group R-2 occupancies operated by a college or university for student or staff housing shall be interconnected with the fire alarm system in accordance with NFPA 72.

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 [~~three stories or greater in height~~] for interior *corridors* and interior common areas. Visible notification appliances are not required within storage units.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1, and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

907.2.11 Single- and multiple-station smoke alarms. *Listed* single- and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with Sections 907.2.11.1 through 907.2.11.7 and NFPA 72.

907.2.11.1 Group R-1. Single- or multiple-station smoke alarms shall be installed in all of the following locations in Group R-1:

1. In sleeping areas.
2. In every room in the path of the *means of egress* from the sleeping area to the door leading from the *sleeping unit*.
3. In each story within the *sleeping unit*, including *basements*. For *sleeping units* with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

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

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

907.2.11.3 Installation near cooking appliances. Smoke alarms shall not be installed in the following locations unless this would prevent placement of a smoke alarm in a location required by Section 907.2.11.1 or 907.2.11.2:

1. Ionization smoke alarms shall not be installed less than 20 feet (6096 mm) horizontally from a permanently installed cooking appliance.
2. Ionization smoke alarms with an alarm-silencing switch shall not be installed less than 10 feet (3048 mm) horizontally from a permanently installed cooking appliance.
3. Photoelectric smoke alarms shall not be installed less than 6 feet (1829 mm) horizontally from a permanently installed cooking appliance.

907.2.11.4 Installation near bathrooms. Smoke alarms shall be installed not less than 3 feet (914 mm) horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by Section 907.2.11.1 or 907.2.11.2.

907.2.11.5 Interconnection. Where more than one smoke alarm is required to be installed within an individual *dwelling unit* or *sleeping unit* in Group R or I-1 occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where *listed* wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

907.2.11.6 Power source. In new construction, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery back-up shall be connected to an emergency electrical system in accordance with Section 1203. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exception: Smoke alarms are not required to be equipped with battery backup where they are connected to an emergency electrical system that complies with Section 603.

907.2.11.7 Smoke detection system. Smoke detectors *listed* in accordance with UL 268 and provided as part of the building fire alarm system shall be an acceptable alternative to single- and multiple-station *smoke alarms* and shall comply with the following:

1. The fire alarm system shall comply with all applicable requirements in Section 907.
2. Activation of a smoke detector in a *dwelling unit* or *sleeping unit* shall initiate alarm notification in the *dwelling unit* or *sleeping unit* in accordance with Section 907.5.2.
3. Activation of a smoke detector in a *dwelling unit* or *sleeping unit* shall not activate alarm notification appliances outside of the *dwelling unit* or *sleeping unit*, provided that a supervisory signal is generated and monitored in accordance with Section 907.6.6.

907.2.12 Special amusement buildings. An automatic smoke detection system shall be provided in special amusement buildings in accordance with Sections 907.2.12.1 through 907.2.12.3.

907.2.12.1 Alarm. Activation of any single smoke detector, the *automatic sprinkler system* or any other automatic fire detection device shall immediately activate an audible and visible alarm at the building at a constantly attended location from which emergency action can be initiated, including the capability of manual initiation of requirements in Section 907.2.12.2.

907.2.12.2 System response. The activation of two or more smoke detectors, a single smoke detector equipped with an alarm verification feature, the *automatic sprinkler system* or other *approved* fire detection device shall automatically do all of the following:

1. Cause illumination of the *means of egress* with light of not less than 1 footcandle (11 lux) at the walking surface level.
2. Stop any conflicting or confusing sounds and visual distractions.
3. Activate an *approved* directional *exit* marking that will become apparent in an emergency.

4. Activate a prerecorded message, audible throughout the special amusement building, instructing patrons to proceed to the nearest *exit*. Alarm signals used in conjunction with the prerecorded message shall produce a sound that is distinctive from other sounds used during normal operation.

907.2.12.3 Emergency voice/alarm communication system. An emergency voice/alarm communication system, which is allowed to serve as a public address system, shall be installed in accordance with Section 907.5.2.2 and be audible throughout the entire special amusement building.

907.2.13 High-rise buildings. ~~[High-rise]~~ B[b]uildings with a floor used for human occupancy located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access shall be provided with an automatic smoke detection/~~fire alarm~~ system in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 of this code and Section 412 of the Dallas ~~[International]~~ *Building Code*.
2. Open parking garages in accordance with Section 406.5 of the Dallas ~~[International]~~ *Building Code*.
3. Open air portions of b[B]uildings with an occupancy in Group A-5 in accordance with Section 303.6[4] of the Dallas ~~[International]~~ *Building Code*; however, this exception does not apply to enclosed concourses or accessory uses areas, including but not limited to sky boxes, restaurants and similarly enclosed areas.
4. Low-hazard special occupancies in accordance with Section 503.1.1 of the Dallas ~~[International]~~ *Building Code*.
5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415 of the Dallas ~~[International]~~ *Building Code*.
6. In Group I-1 and I-2 occupancies, the alarm shall sound at a constantly attended location and occupant notification shall be broadcast by the emergency voice/alarm communication system.

907.2.13.1 Automatic smoke detection. Automatic smoke detection in high-rise buildings shall be in accordance with Sections 907.2.13.1.1 and 907.2.13.1.2.

907.2.13.1.1 Area smoke detection. Area smoke detectors shall be provided in accordance with this section. Smoke detectors shall be connected to an automatic fire alarm system. The activation of any detector required by this section shall activate the emergency voice/alarm communication system in accordance with Section 907.5.2.2. In addition to smoke detectors required by Sections 907.2.1 through 907.2.9, smoke detectors shall be located as follows:

1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room that is not provided with sprinkler protection.
2. In each elevator machine room, machinery space, control room and control space and in elevator lobbies.
3. In all interior corridors serving as a means of egress for an occupant load of 10 or more in Group R-1 and R-2 occupancies.

907.2.13.1.2 Duct smoke detection. Duct smoke detectors complying with Section 907.3.1 shall be located ~~as follows:~~

- ~~1.] i[In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m³/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet per NFPA 72. The actuation of any such detector shall shut down the affected air-handling units or operate dampers to prevent the recirculation of smoke. Controls allowing the manual restarting of air-handling equipment during an alarm condition shall be provided.~~
- ~~2. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air conditioning system. In Group R-1 and R-2 occupancies, a smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m³/s) and serving not more than 10 air inlet openings.]~~

907.2.13.2 Fire department communication system. Where a wired communication system is *approved* in lieu of an in-building, two-way emergency responder communication radio coverage system in accordance with Section 510, the wired fire department communication system shall be designed and installed in accordance with NFPA 72 and shall operate between a *fire command center* complying with Section 508, elevators, elevator lobbies, emergency and standby power rooms, fire pump rooms, areas of refuge and inside *interior exit stairways*. The fire department communication device shall be provided at each floor level within the *interior exit stairway*. The wired communication system and required appurtenances shall be maintained in an operable condition at all times.

907.2.13.3 Multiple-channel voice evacuation. In buildings with an occupied floor more than 120 feet (36 576 mm) above the lowest level of fire department vehicle access, voice evacuation systems for high-rise buildings shall be multiple-channel systems.

907.2.14 Atriums connecting more than two stories. A fire alarm system shall be installed in occupancies with an atrium that connects more than two stories, with smoke detection in locations required by a rational analysis in Section 909.4 and in accordance with the system operation requirements in Section 909.17. The system shall be activated in accordance with Section 907.5. Such occupancies in Group A, E or M shall be provided with an emergency voice/alarm communication system complying with the requirements of Section 907.5.2.2.

907.2.15 High-piled combustible storage areas. An automatic smoke detection system shall be installed throughout *high-piled combustible storage* areas where required by Section 3206.5.

907.2.16 Aerosol storage uses. Aerosol product rooms and general-purpose warehouses containing aerosol products shall be provided with an *approved* manual fire alarm system where required by this code.

907.2.17 Lumber, wood structural panel and veneer mills. Lumber, wood structural panel and veneer mills shall be provided with a manual fire alarm system.

907.2.18 Underground buildings with smoke control systems. Where a smoke control system is installed in an underground building in accordance with the *Dallas*~~*International*~~ *Building Code*, automatic smoke detectors shall be provided in accordance with Section 907.2.18.1.

907.2.18.1 Smoke detectors. Not fewer than one smoke detector *listed* for the intended purpose shall be installed in all of the following areas:

1. Mechanical equipment, electrical, transformer, telephone equipment, elevator machine or similar rooms.
2. Elevator lobbies.
3. The main return and exhaust air plenum of each air-conditioning system serving more than one story and located in a serviceable area downstream of the last duct inlet.
4. Each connection to a vertical duct or riser serving two or more floors from return air ducts or plenums of heating, ventilating and air-conditioning systems, except that in Group R occupancies, a *listed* smoke detector is allowed to be used in

each return air riser carrying not more than 5,000 cfm (2.4 m³/s) and serving not more than 10 air inlet openings.

907.2.18.2 Alarm required. Activation of the smoke control system shall activate an audible alarm at a constantly attended location.

907.2.19 Deep underground buildings. Where the lowest level of a structure is more than 60 feet (18 288 mm) below the finished floor of the lowest *level of exit discharge*, the structure shall be equipped throughout with a manual fire alarm system, including an emergency voice/alarm communication system installed in accordance with Section 907.5.2.2.

907.2.20 Covered and open mall buildings. Where the total floor area exceeds 50,000 square feet (4645 m²) within either a covered mall building or within the perimeter line of an open mall building, an emergency voice/alarm communication system shall be provided. *Access* to emergency voice/alarm communication systems serving a mall, required or otherwise, shall be provided for the fire department. The system shall be provided in accordance with Section 907.5.2.2.

907.2.21 Residential aircraft hangars. Not fewer than one single-station smoke alarm shall be installed within a residential aircraft hangar as defined in Chapter 2 of the Dallas~~[International]~~ *Building Code* and shall be interconnected into the residential smoke alarm or other sounding device to provide an alarm that will be audible in all sleeping areas of the *dwelling*.

907.2.22 Airport traffic control towers. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be provided in airport control towers in accordance with Sections 907.2.22.1 and 907.2.22.2.

Exception: Audible appliances shall not be installed within the control tower cab.

907.2.22.1 Airport traffic control towers with multiple exits and automatic sprinklers. Airport traffic control towers with multiple *exits* and equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 shall be provided with smoke detectors in all of the following locations:

1. Airport traffic control cab.
2. Electrical and mechanical equipment rooms.
3. Airport terminal radar and electronics rooms.
4. Outside each opening into *interior exit stairways*.
5. Along the single *means of egress* permitted from observation levels.

6. Outside each opening into the single *means of egress* permitted from observation levels.

907.2.22.2 Other airport traffic control towers. Airport traffic control towers with a single *exit* or where sprinklers are not installed throughout shall be provided with smoke detectors in all of the following locations:

1. Airport traffic control cab.
2. Electrical and mechanical equipment rooms.
3. Airport terminal radar and electronics rooms.
4. Office spaces incidental to the tower operation.
5. Lounges for employees, including sanitary facilities.
6. *Means of egress*.
7. Utility shafts where *access* to smoke detectors can be provided.

907.2.23 Energy storage systems. An automatic smoke detection system or radiant-energy detection system shall be installed in rooms, areas and walk-in units containing energy storage systems as required in Section 1207.5.4.”

138. Paragraph 907.4.2, “Manual Fire Alarm Boxes,” of Subsection 907.4, “Initiating Devices,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“907.4.2 Manual fire alarm boxes. Where a manual fire alarm system is required by another section of this code, it shall be activated by fire alarm boxes installed in accordance with Sections 907.4.2.1 through 907.4.2.6. Manual alarm actuating devices shall be an approved double action type.

907.4.2.1 Location. Manual fire alarm boxes shall be located not more than 5 feet (1524 mm) from the entrance to each *exit*. In buildings not protected by an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, additional manual fire alarm boxes shall be located so that the distance of travel to the nearest box does not exceed 200 feet (60 960 mm).

907.4.2.2 Height. The height of the manual fire alarm boxes shall be not less than 42 inches (1067 mm) and not more than 48 inches (1372 mm) measured vertically, from the floor level to the activating handle or lever of the box.

907.4.2.3 Color. Manual fire alarm boxes shall be red in color.

Exception: Other colors may be acceptable if red does not provide a contrast with the surrounding background, when approved by the fire code official.

907.4.2.4 Signs. Where fire alarm systems are not monitored by an *approved* supervising station in accordance with Section 907.6.6, an *approved* permanent sign shall be installed adjacent to each manual fire alarm box that reads: “WHEN ALARM SOUNDS—CALL FIRE DEPARTMENT.”

Exception: Where the manufacturer has permanently provided this information on the manual fire alarm box.

907.4.2.5 Protective covers. The *fire code official* is authorized to require the installation of *listed* manual fire alarm box protective covers to prevent malicious false alarms or to provide the manual fire alarm box with protection from physical damage. The protective cover shall be transparent or red in color with a transparent face to permit visibility of the manual fire alarm box. Each cover shall include proper operating instructions. A protective cover that emits a local alarm signal shall not be installed unless *approved*. Protective covers shall not project more than that permitted by Section 1003.3.3.

907.4.2.6 Unobstructed and unobscured. Manual fire alarm boxes shall be provided with *ready access*, unobstructed, unobscured and visible at all times.”

139. Paragraph 907.5.2, “Alarm Notification Appliances,” of Subsection 907.5, “Occupant Notification,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“907.5.2 Alarm notification appliances. Alarm notification appliances shall be provided and shall be *listed* for their purpose.

Exceptions:

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.”

140. Subparagraph 907.5.2.2, Emergency Voice/Alarm Communication Systems,” of Paragraph 907.5.2, “Alarm Notification Appliances,” of Subsection 907.5, “Occupant Notification,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“907.5.2.2 Emergency voice/alarm communication systems. Emergency voice/alarm communication systems required by this code shall be designed and installed accordance with NFPA 72. The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving *approved* information and directions for a general or staged evacuation in accordance with the building’s fire safety and evacuation plans required by Section 404. In high-rise buildings, the system shall operate on at least the alarming floor, the floor above and the floor below, and identify on an annunciator the zone or address from which the alarm signal originated. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:

1. Elevator groups.
2. *Interior exit stairways.*
3. Each floor.
4. *Areas of refuge* as defined in Chapter 2.

Exception: In Group I-1 and I-2 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

907.5.2.2.1 Manual override. A manual override for emergency voice communication shall be provided on a selective and all-call basis for all paging zones.

907.5.2.2.2 Live voice messages. The emergency voice/alarm communication system shall have the capability to broadcast live voice messages by paging zones on a selective and all-call basis.

907.5.2.2.3 Alternative uses. The emergency voice/alarm communication system shall be allowed to be used for other announcements, provided that the manual fire alarm use takes precedence over any other use.

907.5.2.2.4 Emergency voice/alarm communication captions. Where stadiums, arenas and *grandstands* have 15,000 fixed seats or more and provide audible public announcements, the emergency/voice alarm communication system shall provide prerecorded or real-time captions. Prerecorded or live emergency captions shall be from an *approved* location constantly attended by personnel trained to respond to an emergency.

907.5.2.2.5 Standby power. Emergency voice/alarm communications systems shall be provided with standby power in accordance with Section 1203.”

141. Subparagraph 907.5.2.3, “Visible Alarms,” of Paragraph 907.5.2, “Alarm Notification Appliances,” of Subsection 907.5, “Occupant Notification,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, Building and Equipment Features,” of the 2021 International Fire Code is amended to read as follows:

“907.5.2.3 Visible alarms. Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.3. Visual alarm notification appliances shall be provided where an existing fire alarm system is upgraded, altered or a new fire alarm system is installed.

Exceptions:

1. Visible alarm notification appliances are not required in storage areas of Group S occupancies (excluding parking garages and aircraft hangers used only for storage purposes [~~alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed~~].
2. Visible alarm notification appliances shall not be required in *exits* as defined in Chapter 2.
3. Visible alarm notification appliances shall not be required in elevator cars.
4. Visual alarm notification appliances are not required in critical care areas of Group I-2 Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.

5. A visible alarm notification appliance installed in a nurses' control station or other continuously attended staff location in a Group I-2, Condition 2 suite shall be an acceptable alternative to the installation of visible alarm notification appliances throughout the suite or unit in Group I-2, Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2 ”

907.5.2.3.1 Public use areas and common use areas. Visible alarm notification appliances shall be provided in *public use areas* and *common use areas*.

Exception: Where employee work areas have audible alarm coverage, the notification appliance circuits serving the employee work areas shall be initially designed with not less than 20-percent spare capacity to account for the potential of adding visible notification appliances in the future to accommodate hearing-impaired employee(s).

907.5.2.3.2 Groups I-1 and R-1. *Habitable spaces* in *dwelling units* and *sleeping units* in Group I-1 and R-1 occupancies in accordance with Table 907.5.2.3.2 shall be provided with visible alarm notification. Visible alarms shall be activated by the in-room smoke alarm and the building fire alarm system.

**TABLE 907.5.2.3.2
VISIBLE ALARMS**

NUMBER OF SLEEPING UNITS	SLEEPING ACCOMMODATIONS WITH VISIBLE ALARMS
6 to 25	2
26 to 50	4
51 to 75	7
76 to 100	9
101 to 150	12
151 to 200	14
201 to 300	17
301 to 400	20
401 to 500	22
501 to 1,000	5% of total
1,001 and over	50 plus 3 for each 100 over 1,000

907.5.2.3.3 Group R-2. In Group R-2 occupancies required by Section 907 to have a fire alarm system, each *story* that contains *dwelling units* and *sleeping*

units shall be provided with the capability to support future visible alarm notification appliances in accordance with Chapter 11 of ICC A117.1. Such capability shall accommodate wired or wireless equipment.

907.5.2.3.3.1 Wired equipment. Where wired equipment is used to comply with the future capability required by Section 907.5.2.3.3, the system shall include one of the following capabilities:

1. The replacement of audible appliances with combination audible/visible appliances or additional visible notification appliances.
2. The future extension of the existing wiring from the unit smoke alarm locations to required locations for visible appliances.
3. For wired equipment, the fire alarm power supply and circuits shall have not less than 5-percent excess capacity to accommodate the future addition of visible alarm notification appliances, and a single access point to such circuits shall be available on every story. Such circuits shall not be required to be extended beyond a single access point on a story. The fire alarm system shop drawings required by Section 907.1.2 shall include the power supply and circuit documentation to accommodate the future addition of visible notification appliances.

907.5.2.3.4 Notification alarm continuation. Fire alarm systems shall be programmed non-silenceable for all extinguishing and suppression systems. Visible notification appliances shall continue to operate until the fire alarm system has been cleared and reset.

142. Paragraph 907.6.1, “Wiring,” of Subsection 907.6 “Installation and Monitoring,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“907.6.1 Wiring. Wiring shall comply with the requirements of NFPA 70 and NFPA 72. Wireless protection systems utilizing radio-frequency transmitting devices shall comply with the special requirements for supervision of low-power wireless systems in NFPA 72.

907.6.1.1 Installation. All fire alarm systems shall be installed in such a manner that the failure of any single alarm initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All

initiating circuit conductors shall be Class “A” or Class “X” wired with a minimum of six foot horizontal and vertical separation between supply and return circuit conductors. All fire alarm systems shall be wired as follows: IDC — Class A or Class “X” style — D; SLC — Class A or Class “X” style 6; NAC — Class B.

Exception: The initiating device circuit (IDC) from an addressable device used to monitor the status of a suppression system and duct detectors may be wired Class B, Style B provided the addressable device is located within 10 feet of the suppression system device.

907.6.1.2 Support. Fire alarm system wiring, and cables shall be independently supported using guide wires and anchors that are attached to the building structure.

Exception: Independent support wires may be attached to the ceiling grid for stabilization only.

907.6.1.3 Identification. All fire alarm system guide wires shall be painted red or labeled “Fire Alarm Only.” All fire alarm wiring junction boxes shall be labeled “Fire Alarm Use.” All fire alarm circuits shall be identified at terminal and junction boxes.

907.6.1.4 Inspection. All fire alarm system wiring installations shall be inspected by the fire code official for compliance with the requirements of this code, NFPA 70 and NFPA 72.

907.6.1.5 Surge protection. In addition to any built-in surge protection of the fire alarm panel, each fire alarm panel and power supply panel shall have an added surge protector installed. The secondary surge protection device must be installed in a manner that it is isolated a minimum of two feet from the panel as measured along the route of electrical travel. If data lines run between separate buildings, data line surge/spike protection is required on each data line where the line enters and/or exits each building.”

143. Paragraph 907.6.3, “Initiating Device Identification,” of Subsection 907.6, “Installation and Monitoring,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“907.6.3 Initiating device identification. All [The] fire alarm systems, new or replacement, shall identify the specific initiating device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate. Alarms shall not be permitted to be transmitted as a general alarm or zone condition.

Exceptions:

1. Fire alarm systems in single-story buildings less than 22,500 square feet (2090 m²) in area where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.3.1.1.
2. Fire alarm systems that [only] include [~~manual fire alarm boxes, waterflow initiating devices, and~~] not more than 10 additional alarm initiating devices.
- ~~[3 Special initiating devices that do not support individual device identification.~~
- ~~4 Fire alarm systems or devices that are replacing existing equipment.]~~

907.6.3.1 Annunciation. The initiating device status shall be annunciated at an *approved* on-site location.”

144. Paragraph 907.6.6, “Monitoring,” of Subsection 907.6, “Installation and Monitoring,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“907.6.6 Monitoring. Fire alarm systems required by this chapter, other chapters of this code, or by the *Dallas* [~~International~~] *Building Code* shall transmit device identification in accordance with Section 907.6.3 to~~[be monitored by an]~~ an *approved* central station, remote supervising station or proprietary supervising station as defined in [~~accordance with~~] NFPA 72, or a local alarm which gives audible and visual signals at a constantly attended location. A constantly attended location is defined as being occupied by 2 or more persons whose responsibility it is to monitor the fire alarm system.

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

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

907.6.6.1 Transmission of alarm signals. Transmission of alarm signals to a supervising station shall be in accordance with NFPA 72.

907.6.6.2 MIY monitoring. Direct transmission of alarms associated with monitor it yourself (MIY) transmitters to a public safety answering point (PSAP) shall not be permitted unless approved by the *fire code official*.

907.6.6.3 Termination of monitoring service. Termination of fire alarm monitoring services shall be in accordance with Section 901.9.

907.6.6.4 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.

145. Subsection 907.7, “Acceptance Tests and Completion,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“907.7 Acceptance tests and completion. Upon completion of the installation, the fire alarm system and all fire alarm components shall be tested and approved in accordance with NFPA 72 and Section 901.5.

907.7.1 Single- and multiple-station alarm devices. When the installation of the alarm devices is complete, each device and interconnecting wiring for multiple-station alarm devices shall be tested in accordance with the smoke alarm provisions of NFPA 72.

907.7.2 Record of completion. A record of completion in accordance with NFPA 72 verifying that the system has been installed and tested in accordance with the *approved* plans and specifications shall be provided.

907.7.3 Instructions. Operating, testing and maintenance instructions and record drawings (“as built”) and equipment specifications shall be provided at an *approved* location.”

146. Subsection 910.2, “Where Required,” of Section 910, “Smoke and Heat Removal,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“910.2 Where required. Smoke and heat vents or a mechanical smoke removal system shall be installed as required by Sections 910.2.1 through ~~[and]~~ 910.2.3~~[2]~~.

Exceptions:

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

910.2.1 Group F-1 or S-1. Smoke and heat vents installed in accordance with Section 910.3 or a mechanical smoke removal system installed in accordance with Section 910.4 shall be installed in buildings and portions thereof used as a Group F-1 or S-1 occupancy having more than 50,000 square feet (4645 m²) of undivided area. In occupied portions of a building equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with Section 910.4 shall be installed.

Exception: Group S-1 aircraft repair hangars.

910.2.2 High-piled combustible storage. Smoke and heat removal required by Table 3206.2 for buildings and portions thereof containing *high-piled combustible storage* shall be installed in accordance with Section 910.3 in unsprinklered buildings. In buildings and portions thereof containing *high-piled combustible storage* equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, a smoke and heat removal system shall be installed in accordance with Section 910.3 or 910.4. In occupied portions of a building equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with Section 910.4 shall be installed.

910.2.3 Group H. Smoke and heat vents installed in accordance with Section 910.3 or a mechanical smoke removal system in accordance with Section 910.4 shall be installed in 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 m²) 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.”

147. Paragraph 910.3.4, “Vent Operation,” of Subsection 910.3, “Smoke and Heat Vents,” of Section 910 “Smoke and Heat Removal,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“910.3.4 Vent operation. Smoke and heat vents shall be capable of being operated by *approved* automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.1 through 910.3.3.

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°F (approximately 38°C) 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 (approximately 38°C) and 220°F (approximately 122°C) above ambient.

Exception: Listed gravity-operated drop out vents.”

148. Subparagraph 910.4.3.1, “Makeup Air,” of Paragraph 910.4.3, “System Design Criteria,” of Subsection 910.4, “Mechanical Smoke Removal Systems,” of Section 910, “Smoke and Heat Removal,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part

III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended 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 ~~[manual or]~~ 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.”

149. Paragraph 910.4.4, “Activation,” of Subsection 910.4, “Mechanical Smoke Removal Systems,” of Section 910, “Smoke and Heat Removal,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

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

Exception: Manual only systems per Section 910.2.”

150. Subsection 912.2, “Location,” of Section 912, “Fire Department Connections,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“912.2 Location. With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. Fire apparatus access roads shall be required within 50 feet (15 240 mm) of any fire department hose connections. A ~~[The location of]~~ fire department hose connection[s] shall be located within 400 feet (122 m) of a fire hydrant and approved by the fire code official.

912.2.1 Visible location. Fire department connections shall be located on the street side of buildings or facing *approved* fire apparatus access roads, fully visible and recognizable from the street, fire apparatus access road or nearest point of fire department vehicle access or as otherwise *approved* by the *fire code official*.

912.2.2 Existing buildings. On existing buildings, wherever the fire department connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an *approved* sign mounted on the street front or on the side of the building. Such sign shall have the letters “FDC” not less than 6 inches (152 mm) high and words in letters not

less than 2 inches (51 mm) high or an arrow to indicate the location. Such signs shall be subject to the approval of the *fire code official*.

912.2.3 Remote and free-standing fire department connections. Free-standing fire department connections shall be internally and externally galvanized, permanently marked with the address being served, or portion thereof, and provided with approved locking caps/covers. Means to service the drain/check valve shall be provided.

151. Subsection 913.1, “General,” of Section 913, “Fire Pumps,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“913.1 General. Where provided, fire pumps for *fire protection systems* shall be installed in accordance with this section and NFPA 20. 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 feet in width and 6 feet, 8 inches 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.~~[Pumps for automatic sprinkler systems installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.]~~

152. Subsection 913.4, “Valve Supervision,” of Section 913, “Fire Pumps,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“913.4 Valve supervision. Where provided, the fire pump suction, discharge and bypass valves, and isolation valves on the backflow prevention device or assembly shall be supervised open by one of the following methods.

1. Central-station, proprietary, or remote-station signaling service.
2. Local signaling service that will cause the sounding of an audible signal at a *constantly attended location*.
3. Locking valves open, when approved by the fire code official.

4. Sealing of valves and *approved* weekly recorded inspection where valves are located within fenced enclosures under the control of the *owner*, when approved by the fire code official.

913.4.1 Test outlet valve supervision. Fire pump test outlet valves shall be supervised in the closed position.”

153. Section 913, “Fire Pumps,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding a new Subsection 913.6, “Pump Supervision,” to read as follows:

“913.6 Pump supervision. Where the pump room is not constantly attended, the fire pump shall transmit a supervisory signal to indicate loss of power, phase reversal and pump running conditions in accordance with NFPA 20.”

154. Subparagraph 914.3.1.2, “Water Supply to Required Fire Pumps,” of Paragraph 914.3.1, “Automatic Sprinkler System,” of Subsection 914.3, “High-Rise Buildings,” of Section 914, “Fire Protection Based on Special Detailed Requirements of Use and Occupancy,” of Chapter 9, “Fire Protection and Life Safety Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“914.3.1.2 Water supply to required fire pumps. In buildings that are more than 120 [420] feet (36.6 [128] m) in *building height*, [~~and buildings of Type IVA and IVB construction that are more than 120 feet (36.6 m) in building height,~~] required fire pumps shall be supplied by connections to not fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: Two connections to the same main shall be permitted provided that the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through no fewer than one of the connections. The valves shall be placed a distance apart not less than one half of the length of the

diagonal dimension of the lot or area to be served, measured in a straight line between the connections.”

155. Subsection 1001.1, “General,” of Section 1001, “Administration,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“1001.1 General. Buildings or portions thereof shall be provided with a *means of egress* system as required by this chapter. The provisions of this chapter shall control the design, construction and arrangement of *means of egress* components required to provide an *approved means of egress* from structures and portions thereof. Sections 1003 through 1031 shall apply to new construction. Section 1032 shall apply to existing buildings. Provisions of the *Dallas Building Code* and/or the *Dallas Existing Building Code* shall govern in the event of conflicts between this chapter and the corresponding section of the *Dallas Building Code* and/or *Dallas Existing Building Code*.”

Exception: Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the *Dallas*~~*International*~~ *Residential Code*.”

156. Section 1003, “General Means of Egress,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding a new Subsection 1003.8, “Day Care Means of Egress,” to read as follows:

“1003.8 Day care means of egress. Day care facilities, rooms or spaces where care is provided for more than 10 children that are 2 ½ years of age or less, shall have access to not less than two exits or exit access doorways. Rooms normally occupied by preschool, kindergarten, or first grade students shall be located on a level of exit discharge.”

157. Subsection [BE] 1004.5, “Areas Without Fixed Seating,” of Section 1004, “Occupant Load,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“[BE] 1004.5 Areas without fixed seating. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.5. For areas without *fixed seating*, the *occupant load* shall not be less than that number determined by dividing the floor area under consideration by the *occupant load* factor assigned to the function of the space as set forth in Table 1004.5. Where an intended function is not listed in Table 1004.5, the building

[~~fire~~] *code official* shall establish a function based on a listed function that most nearly resembles the intended function.

~~[Exception: Where approved by the fire code official, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by calculation, shall be permitted to be used in the determination of the design occupant load.]~~

[BE]1004.5.1 Increased occupant load. The *occupant load* permitted in any building, or portion thereof, is permitted to be increased from that number established for the occupancies in Table 1004.5, provided that all other requirements of the code are met based on such modified number and the *occupant load* does not exceed one occupant per 7 square feet (0.65 m²) of occupiable floor space. Where required by the *fire code official*, an *approved aisle*, seating or fixed equipment diagram substantiating any increase in *occupant load* shall be submitted. Where required by the *fire code official*, such diagram shall be posted.”

158. Subsection [BE] 1004.7, “Outdoor Areas,” of Section 1004, “Occupant Load,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“**[BE] 1004.7 Outdoor areas.** *Yards*, patios, occupied roofs, *courts* and similar outdoor areas accessible to and usable by the building occupants shall be provided with *means of egress* as required by this chapter. The *occupant load* of such outdoor areas shall be assigned by the building [~~fire~~] *code official* in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, *means of egress* requirements for the building shall be based on the sum of the *occupant loads* of the building plus the outdoor areas.

Exceptions:

1. Outdoor areas used exclusively for service of the building need only have one *means of egress*.
2. The occupant load of the outdoor area need not be added to the building’s total occupant load if: [~~Both outdoor areas associated with Group R-3 and individual dwelling units of Group R-2.~~]
 - 2.1. The outdoor areas are located at grade and associated with Group R-3 and individual dwelling units of Group R-2. Means of egress must be provided from the outdoor area in accordance with this chapter.

- 2.2. The outdoor areas are not located at grade and associated with Group R-3 and individual dwelling units of Group R-2 and the outdoor area occupies not more than 10 percent of the area of the dwelling unit of a nonsprinklered building or not more than 20 percent of the area of the dwelling unit of a building provided throughout with an approved automatic sprinkler system. Means of egress must be provided from the outdoor area in accordance with this chapter.”

159. Paragraph [BE] 1007.1.1, “Two Exits or Exit Access Doorways,” of Subsection [BE] 1007.1 “General,” of Section 1007, “Exit or Exit Access Doorway Configuration,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“[BE] 1007.1.1 Two exits or exit access doorways. Where two *exits, exit access doorways, exit access stairways or ramps*, or any combination thereof, are required from any portion of the *exit access*, 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 building or area to be served measured in a straight line between them. Interlocking or *scissor stairways* shall be counted as one *exit stairway*.

Exceptions:

1. Where *interior exit stairways or ramps* are interconnected by a 1-hour *fire resistance-rated corridor* conforming to the requirements of Section 1020, the required exit separation shall be measured along the shortest direct line of travel within the *corridor*.
2. Where a building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, the separation distance shall not be less than one-third ~~[fourth]~~ of the length of the maximum overall diagonal dimension of the area served.
3. Interlocking stairs are permitted to be counted as two exits if all of the following conditions are met:
 - 3.1. The building is not a high-rise as defined in Section 202;
 - 3.2. The distance between exit doors complies with Section 1007.1;
 - 3.3. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 ~~[or 903.3.1.2]~~;

- 3.4 Each stairway is separated from each other and from the remainder of the building by construction having a fire-resistance rating of not less than 2 hours with no openings or penetrations between the stairways other than hose for standpipes and automatic sprinkler systems. The separation between the stairways is permitted to be constructed as a single wall; and
- 3.5 Each exit meets all of the requirements in Section 1023, including the smokeproof enclosure provisions of Section 909.20.”

[BE]1007.1.1.1 Measurement point. The separation distance required in Section 1007.1.1 shall be measured in accordance with the following:

1. The separation distance to *exit* or *exit access doorways* shall be measured to any point along the width of the doorway.
2. The separation distance to *exit access stairways* shall be measured to the closest riser.
3. The separation distance to *exit access ramps* shall be measured to the start of the *ramp* run.”

160. Subsection [BE] 1009.1, “Accessible Means of Egress Required,” of Section 1009, “Accessible Means of Egress,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

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

Exceptions:

1. One *accessible means of egress* is required from an accessible *mezzanine* level in accordance with Section 1009.3, 1009.4 or 1009.5.

2. In assembly areas with ramped *aisles* or stepped *aisles*, one *accessible means of egress* is permitted where the common path of travel is accessible and meets the requirements in Section 1030.8.
3. Accessible means of egress may satisfy this section if designed in accordance with Article 9102, "Architectural Barriers," of Vernon's Texas Civil Statutes and the "Texas Accessibility Standards of the Architectural Barriers Act," adopted by the Texas Commission of Licensing and Regulation and built-in accordance with state certified plans, including any variances or waivers granted by the state."

161. Subsection [BE] 1010.1, "Doors," of Section 1010, "Doors, Gates and Turnstiles," of Chapter 10, "Means of Egress," of Part III, "Building and Equipment Design Features," of the 2021 International Fire Code is amended to read as follows:

"[BE]1010.1 Doors. Doors in the *means of egress* shall comply with the requirements of Sections 1010.1.1 through 1010.3.4. Exterior exit doors shall also comply with the requirements of Section 1022.2. Gates in the *means of egress* shall comply with the requirements of Sections 1010.4 and 1010.4.1. Turnstiles in the *means of egress* shall comply with the requirements of Sections 1010.5 through 1010.5.4.

Doors, gates and turnstiles provided for egress purposes in numbers greater than required by this code shall comply with the requirements of this section.

Doors in the *means of egress* shall be readily distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as doors. Mirrors or similar reflecting materials shall not be used on *means of egress* doors. *Means of egress* doors shall not be concealed by curtains, drapes, decorations or similar materials.

Security and electronic locking devices affecting means of egress shall be subject to approval by the building official and subject to inspections by the fire code official.

[BE]1010.1.1 Size of doors. The required capacity of each door opening shall be sufficient for the *occupant load* thereof and shall provide a minimum clear opening width of 32 inches (813 mm). The clear opening width of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). Where this section requires a minimum clear opening width of 32 inches (813 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a minimum clear opening width of 32 inches (813 mm). In Group I-2, doors serving as *means of egress* doors where used for the movement of beds shall provide a minimum clear opening width of 41½ inches (1054 mm). The minimum clear opening height of doors shall be not less than 80 inches (2032 mm).

Exceptions:

1. In Group R-2 and R-3 *dwelling* and *sleeping units* that are not required to be an Accessible unit, Type A unit or Type B unit, the minimum width shall not apply to door openings that are not part of the required *means of egress*.
2. Group I-3 door openings to resident *sleeping units* that are not required to be an Accessible unit shall have a minimum clear opening width of 28 inches (711 mm).
3. Door openings to storage closets less than 10 square feet (0.93 m²) in area shall not be limited by the minimum clear opening width.
4. The maximum width of door leaves in revolving doors that comply with Section 1010.3.1 shall not be limited.
5. The maximum width of door leaves in power-operated doors that comply with Section 1010.3.2 shall not be limited.
6. Door openings within a *dwelling unit* or *sleeping unit* shall have a minimum clear opening height of 78 inches (1981 mm).
7. In *dwelling* and *sleeping units* that are not required to be Accessible, Type A or Type B units, exterior door openings, other than the required *exit* door, shall have a minimum clear opening height of 76 inches (1930 mm).
8. In Groups I-1, R-2, R-3 and R-4, in *dwelling* and *sleeping units* that are not required to be Accessible, Type A or Type B units, the minimum clear opening widths shall not apply to interior egress doors.
9. Door openings required to be *accessible* within Type B units intended for user passage shall have a minimum clear opening width of 31.75 inches (806 mm).
10. Doors to walk-in freezers and coolers less than 1,000 square feet (93 m²) in area shall have a maximum width of 60 inches (1524 mm) nominal.
11. Doors serving nonaccessible single-user shower or sauna compartments; toilet stalls; or dressing, fitting or changing rooms shall have a minimum clear opening width of 20 inches (508 mm).

[BE]1010.1.1.1 Projections into clear opening. There shall not be projections into the required clear opening width lower than 34 inches (864 mm) above the floor or

ground. Projections into the clear opening width between 34 inches (864 mm) and 80 inches (2032 mm) above the floor or ground shall not exceed 4 inches (102 mm).

Exception: Door closers, overhead door stops, power door operators, and electromagnetic door locks shall be permitted to be 78 inches (1980 mm) minimum above the floor.

[BE]1010.1.2 Egress door types. Egress doors shall be of the side-hinged swinging door, pivoted door or balanced door types.

Exceptions:

1. Private garages, office areas, factory and storage areas with an *occupant load* of 10 or less.
2. Group I-3 occupancies used as a place of detention.
3. Critical or intensive care patient rooms within suites of health care facilities.
4. Doors within or serving a single *dwelling unit* in Groups R-2 and R-3.
5. In other than Group H occupancies, revolving doors complying with Section 1010.3.1.
6. In other than Group H occupancies, special purpose horizontal sliding, accordion or folding door assemblies complying with Section 1010.3.3.
7. Power-operated doors in accordance with Section 1010.3.2.
8. Doors serving a bathroom within an individual *sleeping unit* in Group R-1.
9. In other than Group H occupancies, manually operated horizontal sliding doors are permitted in a *means of egress* from spaces with an *occupant load* of 10 or less.

[BE]1010.1.2.1 Direction of swing. Side-hinged swinging doors, pivoted doors and balanced doors shall swing in the direction of egress travel where serving a room or area containing an *occupant load* of 50 or more persons or a Group H occupancy.

[BE]1010.1.3 Forces to unlatch and open doors. The forces to unlatch doors shall comply with the following:

1. Where door hardware operates by push or pull, the operational force to unlatch the door shall not exceed 15 pounds (66.7 N).
2. Where door hardware operates by rotation, the operational force to unlatch the door shall not exceed 28 inch-pounds (315 N-cm).

The force to open doors shall comply with the following:

1. For interior swinging egress doors that are manually operated, other than doors required to be fire rated, the force for pushing or pulling open the door shall not exceed 5 pounds (22 N).
2. For other swinging doors, sliding doors or folding doors, and doors required to be fire rated, the door shall require not more than a 30-pound (133 N) force to be set in motion and shall move to a full open position when subjected to not more than a 15-pound (67 N) force.

[BE]1010.1.3.1 Location of applied forces. Forces shall be applied to the latch side of the door.

[BE]1010.1.3.2 Manual horizontal sliding doors. Where a manual horizontal sliding door is required to latch, the latch or other mechanism shall prevent the door from rebounding into a partially open position when the door is closed.

[BE]1010.1.4 Floor elevation. There shall be a floor or landing on each side of a door. Such floor or landing shall be at the same elevation on each side of the door. Landings shall be level except for exterior landings, which are permitted to have a slope not to exceed 0.25 unit vertical in 12 units horizontal (2-percent slope).

Exceptions:

1. At doors serving individual *dwelling units* or *sleeping units* in Groups R-2 and R-3, a door is permitted to open at the top step of an interior flight of stairs, provided that the door does not swing over the top step.
2. At exterior doors serving Groups F, H, R-2 and S and where such doors are not part of an accessible route, the landing at an exterior door shall be not more than 7 inches (178 mm) below the landing on the egress side of the door, provided that the door, other than an exterior storm or screen door, does not swing over the landing.

3. At exterior doors serving Group U and individual *dwelling units* and *sleeping units* in Groups R-2 and R-3, and where such units are not required to be Accessible units, Type A units or Type B units, the landing at an exterior doorway shall be not more than 7³/₄ inches (197 mm) below the landing on the egress side of the door. Such doors, including storm or screen doors, shall be permitted to swing over either landing.
4. Variations in elevation due to differences in finish materials, but not more than 1/2 inch (12.7 mm).
5. Exterior decks, patios or balconies that are part of Type B *dwelling units* or *sleeping units*, that have impervious surfaces and that are not more than 4 inches (102 mm) below the finished floor level of the adjacent interior space of the *dwelling unit* or *sleeping unit*.
6. Doors serving equipment spaces not required to be accessible in accordance with Section 1103.2.9 of the Dallas~~[International]~~ *Building Code* and serving an *occupant load* of five or less shall be permitted to have a landing on one side to be not more than 7 inches (178 mm) above or below the landing on the egress side of the door.

[BE]1010.1.5 Landings at doors. Landings shall have a width not less than the width of the *stairway* or the door, whichever is greater. Doors in the fully open position shall not reduce a required dimension by more than 7 inches (178 mm). Where a landing serves an *occupant load* of 50 or more, doors in any position shall not reduce the landing to less than one-half its required width. Landings shall have a length measured in the direction of travel of not less than 44 inches (1118 mm).

Exception: Landing length in the direction of travel in Groups R-3 and U and within individual units of Group R-2 need not exceed 36 inches (914 mm).

[BE]1010.1.6 Thresholds. Thresholds at doorways shall not exceed 3/4 inch (19.1 mm) in height above the finished floor or landing for sliding doors serving *dwelling units* or 1/2 inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than 1/4 inch (6.4 mm) at doorways shall be beveled with a slope not greater than 1 unit vertical in 2 units horizontal (50-percent slope).

Exceptions:

1. In occupancy Group R-2 or R-3, threshold heights for sliding and side-hinged exterior doors shall be permitted to be up to 7³/₄ inches (197 mm) in height if all of the following apply:

- 1.1. The door is not part of the required *means of egress*.
- 1.2. The door is not part of an *accessible route* as required by Chapter 11 of the Dallas~~[International]~~ *Building Code*.
- 1.3. The door is not part of an accessible unit, Type A unit or Type B unit.
2. In Type B units, where Exception 5 to Section 1010.1.4 permits a 4-inch (102 mm) elevation change at the door, the threshold height on the exterior side of the door shall not exceed 4³/₄ inches (120 mm) in height above the exterior deck, patio or balcony for sliding doors or 4¹/₂ inches (114 mm) above the exterior deck, patio or balcony for other doors.

[BE]1010.1.7 Door arrangement. Space between two doors in a series shall be 48 inches (1219 mm) minimum plus the width of a door swinging into the space. Doors in a series shall swing either in the same direction or away from the space between the doors.

Exceptions:

1. The minimum distance between horizontal sliding power-operated doors in a series shall be 48 inches (1219 mm).
2. Storm and screen doors serving individual *dwelling units* in Groups R-2 and R-3 need not be spaced 48 inches (1219 mm) from the other door.
3. Doors within individual *dwelling units* in Groups R-2 and R-3 other than within Type A *dwelling units*."

162. Paragraph [BE]1010.2.5, "Bolt Locks," of Subsection [BE] 1010.2, "Door Operations," of Section 1010, "Doors, Gates and Turnstiles," of Chapter 10, "Means of Egress," of Part III, "Building and Equipment Design Features," of the 2021 International Fire Code is amended to read as follows:

"[BE] 1010.2.5 Bolt locks. Manually operated flush bolts or surface bolts are not permitted.

Exceptions:

1. On doors not required for egress in individual *dwelling units* or *sleeping units*.

2. Where a pair of doors serves a storage or equipment room, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf.
3. Where a pair of doors serves an *occupant load* of less than 50 persons in a Group B, F, M or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf. The inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.
4. Where a pair of doors serves a Group A, B, F, M or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf provided such inactive leaf is not needed to meet egress capacity requirements and the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1. The inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.
5. Where a pair of doors serves patient care rooms in Group 1-2 occupancies, self-latching edge- or surface-mounted bolts are permitted on the inactive leaf provided that the inactive leaf is not needed to meet egress capacity requirements and the inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.”

163. Paragraph [BE] 1010.2.7, “Stairway Doors,” of Subsection [BE] 1010.2, “Door Operations,” of Section 1010, “Doors, Gates and Turnstiles,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Standards,” of the 2021 International Fire Code is amended to read as follows:

“[BE] 1010.2.7 **Stairway doors.** Interior *stairway means of egress* doors shall be openable from both sides without the use of a key or special knowledge or effort.

Exceptions:

1. *Stairway* discharge doors shall be openable from the egress side and shall only be locked from the opposite side.
2. This section shall not apply to doors arranged in accordance with Section 403.5.3 of the Dallas [~~International~~] *Building Code*.
3. In stairways serving buildings other than a high-rise building s[~~S~~] *tairway* exit doors are permitted to be locked from the side opposite the egress side, provided that they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon a signal from the *fire command center*, if present, or a signal by emergency personnel from a single location inside the main entrance to the building.

4. *Stairway exit* doors shall be openable from the egress side and shall only be locked from the opposite side in Group B, F, M and S occupancies where the only interior access to the tenant space is from a single *exit stairway* where permitted in Section 1006.3.4.
5. *Stairway exit* doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the *dwelling unit* is from a single exit stairway where permitted in Section 1006.3.4.”

164. Paragraph [BE] 1010.2.11, “Door Hardware Release of Electrically Locked Egress Doors,” of Paragraph 1010.2, “Door Operations,” of Section 1010, “Doors, Gates and Turnstiles,” of Chapter 10, “Means of Egress,” of Part III, Building and Equipment Design Standards,” of the 2021 International Fire Code is amended to read as follows:

“[BE] 1010.2.11 Door hardware release of electrically locked egress doors. Doors in all occupancies are permitted to be equipped with approved, listed electronic locks which must be installed in accordance with this section if the building is protected throughout with an automatic sprinkler system, a fire alarm system, a smoke detection system or with UL 268 smoke detectors installed on each interior side of all doors provided with electronic locks. The locking system units shall be listed in accordance with UL 294. [hardware release of electric locking systems shall be permitted on doors in the means of egress in any occupancy except Group H where installed and operated in accordance with all of the following:

- ~~1. The door hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.~~
- ~~2. The door hardware is capable of being operated with one hand and shall comply with Section 1010.2.1.~~
- ~~3. Operation of the door hardware directly interrupts the power to the electric lock and unlocks the door immediately.~~
- ~~4. Loss of power to the electric locking system automatically unlocks the door.~~
- ~~5. Where panic or fire exit hardware is required by Section 1010.2.9, operation of the panic or fire exit hardware also releases the electric lock.~~
- ~~6. The locking system units shall be listed in accordance with UL 294.]~~

Exception: Electronic strikes or electronic mortise locks that do not impede egress are not subject to these requirements.

1010.2.11.1 Ability to exit. Regardless of the location of the device or the level of security desired, the ability to exit at the option of the individual, not the controlling authority, must always be provided.

Exceptions:

1. Locations for occupants needing self-protection because of reduced mental capacities such as mental or Alzheimer care hospitals may have release mechanisms as further specified in Section 1010.2.11.4
2. Locations where national security interests are present with approval of the *building official*.
3. Modified arrangements may be made for nursery and obstetric areas, assisted living facilities and other similar facilities with approval of the *building official*. (Note: For interior locations such as elevator lobbies, access includes passage into and through the tenant space being secured to provide access to the stairway. If access through the secured area is not desired, another exiting method such as providing a public corridor to the stairway should be utilized.)

1010.2.11.2 General. Electronic locking devices installed in such a manner that the method of unrestricted exiting relies upon electricity or electronics instead of mechanical means shall comply with the provisions set forth in this section. General guidelines for such installation are as follows:

1. Entrance doors in buildings with an occupancy in Group A, B, E or M shall not be secured from the egress side during periods that the building is open to the general public.
2. Access to exits, even in non-fire situations, shall be available to all individuals, even those individuals that are considered as unauthorized. Manually activated release mechanisms shall be made available. For specific provisions and exceptions, see Section 1010.2.11.4
3. For emergency situations, buildings shall be provided with an automatic release mechanism as specified in Section 1010.2.11.5.
4. Once released, the door shall swing freely as a push/pull door. For specific provisions and exceptions, see Section 1010.2.11.6.
5. Request to exit buttons, break glass boxes and emergency pull boxes, with their required signs, shall be installed in accordance with Sections 1010.2.11.4 and 1010.2.11.7.
6. All devices used in a fire rated/fire door situation shall be approved for such use.

1010.2.11.3 Permits and inspections. A separate permit is required to install electronic security devices. Permits will be issued as SE permits and the fee will be based on the value of the work. Delayed egress locks meeting the criteria set forth in Section 1010.2.11.7 will not require separate permits. Electronic security devices shall be approved by the *building official* and shall be functionally tested by the fire marshal.

1010.2.11.4 Access to exits/manual release mechanisms. Passage through the secured door shall be provided.

(Note: Under usual circumstances, passage by individuals on the inside, going to the outside, is made available. Controls are usually installed to prevent unauthorized entry. Examples of such installations are the lobby entrance doors where exiting is by pushing the exit button.)

Normal passage shall be provided with the use of an approved button installed in accordance with Section 1010.2.11.7.

Other acceptable normal release methods for all other occupancies may include options as follows:

1. Pushing on or making contact with an approved electronic release bar. Such bars shall be installed such that they will fail in the released position should the electrical connection with the bar be lost.
2. Where panic or fire exit hardware is required by Section 1010.2.9, operation of the listed panic or fire exit hardware also releases the electromagnetic lock.
3. Use of an approved motion detector. Upon detection of an approach, the device will unlatch. When using a motion detector, a release button in accordance with Section 1010.2.11.7 is still required to be installed in case of failure or inaccurate detection of the motion device.

When access to the exits requires passage through the device, manual release mechanisms shall be made available.

(Note: Examples of such installations that shall provide a manual override method are as follows:

1. Elevator lobbies on full floor tenants. Access to the exit stairs is controlled and the exit path is through the device and tenant space. To permit access to the stairs, a manual override system shall be installed.
2. Warehouses/factories where employees are required to enter and exit through one point. Use of other building exits are undesired and controlled. A manual override system shall still be installed at the controlled exits.

3. Secured systems where employee ingress/egress is monitored at all secured doors. A manual override system shall still be installed at each door.
4. Occupancies like jewelry stores where the desire is to buzz entry and exit. Buzzing entry is acceptable. Buzzing exit may be used but a manual override system shall still be installed at the door.)

When passage of individuals is undesired, unless other approved exits are available, access at the option of the individual shall be provided. Acceptable release methods may include options as follows:

1. An emergency pull box or a break glass emergency box may be located adjacent to the door to activate the release in an emergency. Choice of box shall be approved by the fire chief so as not to be confused with any other alarm boxes. An approved sign shall be adjacent to the box with the appropriate message such as "Pull to Open Door" or "Break Glass to Open Door."
2. When approved by the building official, a release button will not be required for buildings provided with an approved automatic sprinkler system throughout with monitored 24-hour security personnel on site, if a means for two-way communication with security such as intercom or telephone is provided in an approved location. Controls shall be provided at the security station for unlatching the electronic device. The two-way communication system shall be wired through a supervised circuit as defined in the *Dallas Fire Code*.
3. In I Occupancies provided with an approved automatic sprinkler system throughout, the release button will not be required provided a control for releasing the device is provided at a nurse station and a deactivation method, e.g. a keyed control, a control pad or card reader, is provided at the door and staff is supplied with the appropriate tool or knowledge to operate the release mechanism.

1010.2.11.5 Automatic release mechanisms. Electronic locking devices shall have automatic releasing that complies with the following:

1. Automatically release upon activation of the smoke detection or fire alarm system, if provided. The control devices shall remain unlocked until the system has been reset.
2. When the area of concern has a sprinkler system, automatically release upon activation of a waterflow alarm or trouble signal. The control devices shall remain unlocked until the system is reset.
3. Automatically release upon loss of electrical power to the building or to the electronic device. Locking mechanisms shall not be provided with emergency backup power such as generators or batteries.

4. Automatically release upon activation of a manual release mechanism as specified in Section 1010.2.11.4 and as further specified in Section 1010.2.11.7.

Manually resetting the devices is not required. Automatically resetting the devices may be done by zone.

1010.2.11.5.1 Zone control. Deactivation of the device(s) may be zone controlled as follows:

1. All devices on the same floor as the source of activation in fully sprinklered buildings.
2. All devices on the same floor as the source of activation of the smoke detection system plus one floor below and all floors above in unsprinklered buildings.

(Note: When security is still desired after the automatic release of the system, or when positive latching is necessary for fire door installation, it is still possible to maintain security provided the appropriate combination of devices is installed. As an example, use of panic hardware or doorknobs that provide mechanical exiting at all times, but do not function from the exterior unless electronically activated, will still provide a secured door. It will provide the required manual exiting but entry by card or code is not available until the system resets.

No such provision of restricting entry can be used when passage through the device is necessary for access to the exit. As an example, when the elevator lobby is secured from the exit stairs by a full floor tenant, upon automatic activation those devices shall release and access be provided through the tenant space to the stairs. A manual locking system cannot be installed to insure security.)

1010.2.11.6 Door swing freely/single exit motion. Doors shall swing freely when the device is released.

(Note: It is required that the exit motion require only one activity. With normal doors, one activity is pushing the mechanical panic bar or turning the mechanical doorknob. With an electronic device, one motion is pushing the button; therefore, pushing the button and pushing a panic bar or turning a doorknob would be two activities. An acceptable alternative is to use a motion detector (push button is still required). The motion detector will release the device upon approach and turning the doorknob is now just one activity. The push button is only necessary should the motion device fail. Another option is to use an electronic panic bar. One motion, pushing the bar, is for exiting but entry is controlled. Or, use of an electronic doorknob where exiting is always mechanical but the entry side does not engage without electronic activation.)

Exception: When doors are required to have positive latching, the building official and fire chief shall determine:

1. if a double motion to exit, i.e. the release of the electronic device then the operation of a door knob or push bar, is an acceptable exit means; or
2. if the latch should be designed to fail in the secure position; or
3. whether to deny the usage of the locks.

1010.2.11.7 Request to exit buttons/break glass boxes/emergency pull boxes. Exit buttons, break glass boxes and emergency pull boxes shall be installed as follows:

1. **Button.** The release button shall be red in color and at least a two-inch (50.8 mm) mushroom switch or two-inch (50.8 mm) square lexan palm button.
2. **Location.** The button, break glass box or emergency pull box shall be located 40 inches (1016 mm) to 48 inches (1219 mm) vertically above the floor and within five feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device.
3. **Sign.** An approved sign shall be adjacent to the button, break glass box or emergency pull box with the words “Push to Exit” or “Pull to Exit” as applicable. Sign lettering shall be white on a red background and at least one inch (25 mm) in height and shall have a stroke of not less than ¹/₈ inch (3.2 mm).
4. **Activation.** When operated, the manual unlocking device shall result in direct interruption of power to the device, independent of the access control system electronics, and the device shall remain unlocked for a minimum of 30 seconds. It shall not be required that the release mechanism be constantly held, such as holding down the button, to get out.

(Note: When buzzing someone out, holding down the button is acceptable; however, the manual release device installed at the door, even those required in the occupancy using buzzing, shall not require constant holding down to exit.)
5. **Time delay.** Exit devices in accordance with this section shall not possess a time delay option.”

165. Subsection [BE] 1011.9, “Curved Stairways,” of Section 1011, “Stairways,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“[BE]1011.9 Curved stairways. Curved *stairways* with *winder* treads shall have treads and risers in accordance with Section 1011.5 and the smallest radius shall be not less than twice the minimum width or required capacity of the *stairway*.

Exceptions:

1. The radius restriction shall not apply to curved *stairways* in Group R-3, and within individual *dwelling units* in Group R-2.
2. Private circular stairways may be used as convenience stairways, provided the width of the stairway shall not be less than 44 inches (1711.6 mm) with the interior radius not less than 44 inches (1711.6 mm). In all cases, the stairway shall comply with the structural provisions and Chapter 6 of the *Dallas Building Code*.

166. Subsection [BE]1016.2, “Egress Through Intervening Spaces,” of Section 1016, “Exit Access,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“[BE]1016.2 Egress through intervening spaces. Egress through intervening spaces shall comply with this section.

1. *Exit access* through an enclosed elevator lobby is permitted. Where access to two or more *exits* or *exit access doorways* is required in Section 1006.2.1, access to not less than one of the required *exits* shall be provided without travel through the enclosed elevator lobbies required by Section 3006 of the *Dallas* [~~*International*~~] *Building Code*. Where the path of *exit access* travel passes through an enclosed elevator lobby the level of protection required for the enclosed elevator lobby is not required to be extended to the *exit* unless direct access to an *exit* is required by other sections of this code.
2. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas and the area served are accessory to one or the other; are not a Group H occupancy and provide a discernible path of egress travel to an *exit*.

Exception: *Means of egress* are not prohibited through adjoining or intervening rooms or spaces in a Group H, S or F occupancy where the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.

3. An *exit access* shall not pass through a room that can be locked to prevent egress.
4. *Means of egress* from *dwelling units* or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.

5. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.

Exceptions:

1. *Means of egress* are not prohibited through a kitchen area serving adjoining rooms constituting part of the same *dwelling unit* or *sleeping unit*.
2. *Means of egress* are not prohibited through stockrooms in Group M occupancies when all of the following are met:
 - 2.1. The stock is of the same hazard classification as that found in the main retail area.
 - 2.2. Not more than 50 percent of the *exit access* is through the stockroom.
 - 2.3. The stockroom is not subject to locking from the egress side.
 - 2.4. There is a demarcated, minimum 44-inch-wide (1118 mm) *aisle* defined by full- or partial-height fixed walls or similar construction that will maintain the required width and lead directly from the retail area to the *exit* without obstructions.
3. In a building protected throughout by an approved automatic sprinkler system, one exit may pass through a kitchen or storeroom provided the following are met:
 - 3.1. The exit door is visible upon entering the kitchen or storeroom and is clearly marked and identifiable as an exit.
 - 3.2. The required exit width through the kitchen or storeroom is permanently marked and maintained clear and unobstructed.

[BE]1016.2.1 Multiple tenants. Where more than one tenant occupies any one floor of a building or structure, each tenant space, *dwelling unit* and *sleeping unit* shall be provided with access to the required *exits* without passing through adjacent tenant spaces, *dwelling units* and *sleeping units*.

Exception: The *means of egress* from a smaller tenant space shall not be prohibited from passing through a larger adjoining tenant space where such rooms or spaces of the smaller tenant occupy less than 10 percent of the area of the larger tenant space through which they pass; are the same or similar occupancy group; a discernable path of egress travel to an *exit* is provided; and the *means of egress* into the adjoining space is not subject to locking from the egress side. A required *means of egress* serving the larger tenant space shall not pass through the smaller tenant space or spaces.”

167. Subsection [BE] 1020.2, “Construction,” of Section 1020, “Corridors,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“[BE] **1020.2 Construction.** *Corridors shall be fire-resistance rated in accordance with Table 1020.2. The corridor walls required to be fire-resistance rated shall comply with Section 708 of the Dallas [~~International~~] Building Code for fire partitions.*

Exceptions:

1. *A fire-resistance rating is not required for corridors in an occupancy in Group E where each room that is used for instruction has not less than one door opening directly to the exterior and rooms for assembly purposes have not less than one-half of the required means of egress doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.*
2. *A fire-resistance rating is not required for corridors contained within a dwelling unit or sleeping unit in an occupancy in Groups I-1 and R.*
3. *A fire-resistance rating is not required for corridors in open parking garages.*
4. *A fire-resistance rating is not required for corridors in an occupancy in Group B that is a space requiring only a single means of egress complying with Section 1006.2.*
5. *Corridors adjacent to the exterior walls of buildings shall be permitted to have unprotected openings on unrated exterior walls where unrated walls are permitted by Table 705.5 of the Dallas [~~International~~] Building Code and unprotected openings are permitted by Table 705.8 of the Dallas [~~International~~] Building Code.*
6. *Corridor walls and ceilings need not be of fire-resistive construction within the applicable single tenant space as listed in Table 1020.2 in the Dallas Building Code when the space is equipped with an approved automatic smoke detection system within the corridor. The actuation of any detector shall activate alarms audible in all areas served by the corridor. The smoke detection system shall be connected to the building’s fire alarm system where such a system is provided.*

[BE]1020.2.1 Hoistway opening protection. Elevator hoistway openings shall be protected in accordance with Section 3006.2.1 of the Dallas[~~International~~] Building Code.”

168. Subsection [BE] 1031.2, “Where Required,” of Section 1031, “Emergency Escape and Rescue,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“[BE] 1031.2 Where required. In addition to the *means of egress* required by this chapter, *emergency escape and rescue openings* shall be provided in Group R and I-1.

Basements and sleeping rooms below the fourth *story above grade plane* shall have not fewer than one *emergency escape and rescue opening* in accordance with this section. Where *basements* contain one or more sleeping rooms, an *emergency escape and rescue opening* shall be required in each sleeping room but shall not be required in adjoining areas of the *basement*. Such openings shall open directly into a *public way* or to a yard or *court* that opens to a *public way*.

Exceptions:

1. *Basements* with a ceiling height of less than 80 inches (2032 mm) shall not be required to have *emergency escape and rescue openings*.
2. *Emergency escape and rescue openings* are not required from *basements* or sleeping rooms that have an *exit door* or *exit access door* that opens directly into a *public way* or to a *yard, court* or exterior egress balcony that opens to a *public way*.
3. *Basements* without *habitable spaces* and having not more than 200 square feet (18.6 m²) in floor area shall not be required to have *emergency escape and rescue openings*.
4. *Storm shelters* are not required to comply with this section where the shelter is constructed in accordance with ICC 500.
5. Within individual *dwelling* and *sleeping units* in Groups R-2 and R-3, where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, sleeping rooms in *basements* shall not be required to have *emergency escape and rescue openings* provided that the *basement* has one of the following:
 - 5.1. One *means of egress* and one *emergency escape and rescue opening*.
 - 5.2. Two *means of egress*.

[BE]1031.2.1 Operational constraints and opening control devices. Emergency escape and rescue openings shall be operational from inside the room without the use of keys or tools. Window-opening control devices complying with ASTM F2090 shall be permitted for use on windows serving as a required emergency escape and rescue opening.”

169. Subsection 1032.2, “Reliability,” of Section 1032, “Maintenance of the Means of Egress,” of Chapter 10, “Means of Egress,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended 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 [~~where the building area served by the means of egress is occupied~~]. An *exit* or *exit passageway* shall not be used for any purpose that interferes with a *means of egress*.

1032.2.1 Security devices and egress locks. Security devices affecting *means of egress* shall be subject to approval of the *fire code official*. Security devices and locking arrangements in the *means of egress* that restrict, control, or delay egress shall be installed and maintained as required by this chapter.

1032.2.1.1 Fire escapes. Security enclosures, fences or screening for fire escape stairways shall be *approved* by the *fire code official* and shall be constructed such that they do not impede egress to the *public way*. Means shall be provided for emergency personnel to access the fire escape stair from the exterior of the enclosure.

[BE] 1032.2.2 Locking arrangements in educational occupancies. In Group E occupancies, Group B educational occupancies and Group I-4 occupancies, egress doors from classrooms, offices and other occupied rooms shall be permitted to be provided with locking arrangements designed to keep intruders from entering the room where all of the following conditions are met:

1. The door shall be capable of being unlocked from outside the room with a key or other approved means.
2. The door shall be openable from within the room in accordance with Section 1010.2.
3. Modifications shall not be made to existing listed panic hardware, fire door hardware or door closers.
4. Modifications to fire door assemblies shall be in accordance with NFPA 80.”

170. Section 1101, “General,” of Chapter 11, “Construction Requirements for Existing Buildings,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding a new Subsection 1101.5, “Installation Acceptance Testing of Fire and Life Safety System Components for Existing Buildings,” to read as follows:

“1101.5 Installation acceptance testing of fire and life safety system components for existing buildings. The installation, upgrades or repairs to fire and life safety systems in existing buildings and appurtenances thereto shall be in accordance with Section 901.5.

1101.5.1 Fire alarm system design standards. Where an existing fire alarm system is upgraded or replaced, including fire alarm control panel replacements, the devices shall be addressable. Fire alarm systems utilizing more than 20 initiating devices shall be analog addressable systems. When provided, visual alarm notification appliances shall be installed throughout all contiguous spaces (tenant space, lease space or other definable boundaries) as approved by the *fire code official*.

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 pending *fire code official* approval.

1101.5.2 Monitoring requirements. Refer to Section 907.6.6 for applicable requirements.”

171. Subsection 1103.5, “Sprinkler Systems,” of Section 1103, “Fire Safety Requirements for Existing Buildings,” of Chapter 11, “Construction Requirements for Existing Buildings,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding a new Paragraph 1103.5.6, “Spray Booths and Rooms,” to read as follows:

“1103.5.6 Spray booths and rooms. Existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 2404.”

172. Subsection 1103.7, “Fire Alarm Systems,” of Section 1103, “Fire Safety Requirements for Existing Buildings,” of Chapter 11, “Construction Requirements for Existing Buildings,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding Paragraph 1103.7.7, “Group A,” to read as follows:

“1103.7.7 Group A. A fire alarm system shall be installed in existing Group A occupancies in accordance with Section 907.2.1.

Exception: Group A-S occupancies.”

173. Subsection 1103.7, “Fire Alarm Systems,” of Section 1103, “Fire Safety Requirements for Existing Buildings,” of Chapter 11, “Construction Requirements for Existing Buildings,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding Paragraph 1103.7.8, “Group B,” to read as follows:

“1103.7.8 Group B. A fire alarm system shall be installed in existing Group B occupancies in accordance with Section 907.2.2.”

174. Subsection 1103.7, “Fire Alarm Systems,” of Section 1103, “Fire Safety Requirements for Existing Buildings,” of Chapter 11, “Construction Requirements for Existing Buildings,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding Paragraph 1103.7.9, “Group M,” to read as follows:

“1103.7.9 Group M. A fire alarm system shall be installed in existing Group M occupancies in accordance with Section 907.2.7.”

175. Paragraph 1203.1.3, “Installation,” of Subsection 1203.1, “General,” of Section 1203, “Emergency and Standby Power Systems,” of Chapter 12, “Energy Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“1203.1.3 Installation. Emergency power systems and standby power systems shall be installed in accordance with the *Dallas [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.”

176. Paragraph 1203.1.5, “Load Duration,” of Subsection 1203.1, “General,” of Section 1203, “Emergency and Standby Power Systems,” of Chapter 12, “Energy Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“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.”

177. Subsection 1203.1, “General,” of Section 1203, “Emergency and Standby Power Systems,” of Chapter 12, “Energy Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended by adding a new Paragraph 1203.1.10, “Critical Operations Power Systems (COPS),” to read as follows:

“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.”

178. Subsection 1203.2, “Where Required,” of Section 1203, “Emergency and Standby Power Systems,” of Chapter 12, “Energy Systems,” of Part III, “Building and Equipment Design Features,” of the 2021 International Fire Code is amended to read as follows:

“1203.2 Where required. Emergency and standby power systems shall be provided where required by Sections 1203.2.1 through 1203.2.26 or elsewhere identified in this code or any other referenced code[1203.2.19].”

1203.2.1 Ambulatory care facilities. Essential electrical systems for ambulatory care facilities shall be in accordance with Section 422.6 of the Dallas[~~International~~] *Building Code*.

1203.2.2 Elevators and platform lifts. Standby power shall be provided for elevators and platform lifts as required in Sections 604.3, 1009.4.1 and 1009.5.

1203.2.3 Emergency responder communication coverage systems. Standby power shall be provided for inbuilding, two-way emergency responder communication coverage systems as required in Section 510.4.2.3. The standby power supply shall be capable of operating the in-building, two-way emergency responder communication coverage system at 100-percent system operation capacity for a duration of not less than 12 hours.

1203.2.4 Emergency voice/alarm communications systems. Standby power shall be provided for emergency voice/alarm communications systems in the following occupancies, or as specified elsewhere in this code, in accordance with NFPA 72:

Covered and Open Malls, Section 907.2.19 and 914.2.3.

Group A Occupancies, Sections 907.2.1 and 907.5.2.2.4.

Special Amusement Buildings, Section 907.2.11.

High-rise Buildings, Section 907.2.12.

Atriums, Section 907.2.13.

Deep Underground Buildings, Section 907.2.18.

1203.2.5 Exhaust ventilation. Standby power shall be provided for mechanical exhaust ventilation systems as required in Section 1207.6.1.2.1. The system shall be capable of powering the required load for a duration of not less than 2 hours.

1203.2.6 Exit signs. Emergency power shall be provided for exit signs as required in Section 1013.6.3. The system shall be capable of powering the required load for a duration of not less than 90 minutes.

1203.2.7 Gas detection systems. Emergency power shall be provided for gas detection systems where required by Sections 1203.2.10 and 1203.2.17. Standby power shall be provided for gas detection systems where required by Sections 916.5 and 1207.6.1.2.4.

1203.2.8 Group I-2 occupancies. Essential electrical systems for Group I-2 occupancies shall be in accordance with Section 407.11 of the Dallas [~~International~~] *Building Code*.

1203.2.9 Group I-3 occupancies. Power-operated sliding doors or power-operated locks for swinging doors in Group I-3 occupancies shall be operable by a manual release mechanism at the door. Emergency power shall be provided for the doors and locks.

Exceptions:

1. Emergency power is not required in facilities where provisions for remote locking and unlocking of occupied rooms in Occupancy Condition 4 are not required as set forth in the Dallas [~~International~~] *Building Code*.
2. Emergency power is not required where remote mechanical operating releases are provided.

1203.2.10 Hazardous materials. Emergency and standby power shall be provided in occupancies with hazardous materials as required in the following sections:

1. Sections 5004.7 and 5005.1.5 for hazardous materials.
2. Sections 6004.2.2.8 and 6004.3.4.2 for highly toxic and toxic gases.
3. Section 6204.1.11 for organic peroxides.

1203.2.11 High-rise buildings. Standby power and emergency power shall be provided for high-rise buildings as required in Section 403 of the Dallas [~~International~~] *Building Code*, and shall be in accordance with Section 1203.

1203.2.12 Special purpose horizontal sliding doors. Standby power shall be provided for horizontal sliding doors as required in Section 1010.3.3. The standby power supply shall have a capacity to operate not fewer than 50 closing cycles of the door.

1203.2.13 Hydrogen fuel gas rooms. Standby power shall be provided for hydrogen fuel gas rooms as required by Section 5808.7.

1203.2.14 Laboratory suites. Standby or emergency power shall be provided in accordance with Section 5004.7 where *laboratory suites* are located above the sixth story above *grade plane* or located in a story below *grade plane*.

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

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. Standby power shall be provided for auxiliary inflation systems in permanent membrane structures in accordance with Section 2702 of the Dallas [~~International~~] *Building Code*. 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 Semiconductor fabrication facilities. Emergency power shall be provided for semiconductor fabrication facilities as required in Section 2703.15.

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, *Dallas Building Code*, Section 402.7

Atriums, *Dallas Building Code*, Section 404.7

Underground Buildings, *Dallas Building Code*, Section 405.8

Group I-3, Dallas Building Code, Section 408.4.2

Stages, Dallas Building Code, Section 410.2.5

Special Amusement Buildings (as applicable to Group A's), Dallas Building Code, Section 411.1

Smoke Protected Seating, Section 1030.6.2.

1203.2.19 Underground buildings. Emergency and standby power shall be provided in underground buildings as required in Section 405 of the Dallas [International] Building Code and shall be in accordance with Section 1203.

1203.2.20 Covered and open mall buildings. Emergency power shall be provided in accordance with Section 907.2.19 and 914.2.3.

1203.2.21 Airport traffic control towers. A standby power system shall be provided in airport traffic control towers more than 65 feet 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 Section 909.20.6.2 of the Dallas Building Code.

1203.2.23 Elevator pressurization. Standby power shall be provided for elevator pressurization system as required by Section 909.21.5 of the Dallas Building Code.

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 Section 717.5.3, exception 2.3 of the Dallas Building Code.

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 Section 504.10, Item 7 Dallas Mechanical Code.

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."

179. Subsection 2301.1, “Scope,” of Section 2301, “General,” of Chapter 23, “Motor Fuel-Dispensing Facilities and Repair Garages,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“2301.1 Scope. Automotive motor fuel-dispensing facilities, marine motor fuel-dispensing facilities, fleet vehicle motor fuel-dispensing facilities, aircraft motor-vehicle fuel-dispensing facilities and repair garages shall be in accordance with this chapter and the Dallas [International] Building Code, Dallas [International] Fuel Gas Code and Dallas [International] Mechanical Code. Such operations shall include both those that are open to the public and private operations. Flammable and combustible liquids, compressed natural gas, hydrogen and liquefied petroleum gas shall also be in accordance with Chapters 57, 58 and 61.”

180. Subsection 2301.3, “Construction Documents,” of Section 2301, “General,” of Chapter 23, “Motor Fuel-Dispensing Facilities and Repair Garages,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“2301.3 Construction documents. *Construction documents* shall be submitted for review and approval prior to the installation or construction of automotive, marine or fleet vehicle motor fuel-dispensing facilities and repair garages [~~in accordance with Section 106.1~~]. Site plans shall be submitted that illustrate the location of flammable liquid, LP-gas, compressed natural gas (CNG), or hydrogen storage vessels, or liquefied natural gas (LNG) and their spatial relation to each other, property lines and building openings. Both aboveground and underground storage vessels shall be shown on plans. For each type of station, plans and specifications shall include, but not be limited to, the following:

1. **Flammable and combustible liquids:** the type and design of underground and aboveground liquid storage tanks; the location and design of the fuel dispensers and dispenser nozzles; the design and specifications for related piping, valves and fittings; the location and classification of electrical equipment, including emergency fuel shutdown devices; and specifications for fuel storage and venting components.
2. **Liquefied petroleum gas:** equipment and components as required in NFPA 58; the location and design of the LP-gas dispensers and dispenser nozzles; the design, specifications and location for related piping, valves and fittings; the location and classification of electrical equipment, including emergency fuel shutdown devices; and specifications for fuel storage and pressure-relief components.

3. **Compressed natural gas:** when provided, the location of CNG compressors; the location and design of CNG dispensers and vehicle fueling connections; the design, specification and location for related piping, valves and fittings; the location and classification of electrical equipment, including emergency fuel shutdown devices; and specification for fuel storage and pressure-relief components.
4. **Hydrogen:** when provided, the location of equipment used for generation of hydrogen; the location of hydrogen compressors; the location and design of hydrogen dispensers and vehicle fueling connections; the design, specification and location for related piping, valves and fittings; the location and classification of electrical equipment, including emergency fuel shutdown devices; and specification for fuel storage and pressure-relief components.
5. **Liquefied natural gas:** equipment and components as required in NFPA 52 and NFPA 59A; the location and design of the LP-gas dispensers and dispenser nozzles; the design, specifications and location for related piping, valves and fittings; the location and classification of electrical equipment, including emergency fuel shutdown devices; and specifications for fuel storage and pressure-relief components.”

181. Subsection 2304.1, “Supervision of Dispensing,” of Section 2304, “Dispensing Operations,” of Chapter 23, “Motor Fuel-Dispensing Facilities and Repair Garages,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“2304.1 Supervision of dispensing. The dispensing of fuel at motor fuel-dispensing facilities shall be ~~[conducted by a qualified attendant or shall be under the supervision of a qualified attendant at all times or shall be]~~ in accordance with the following:

1. Conducted by a qualified attendant;
2. Conducted under the supervision of a qualified attendant; or
3. Conducted as 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 comply with Section 2304.3.”

182. Subsection 2401.2, “Nonapplicability,” of Section 2401, “General,” of Chapter 24, “Flammable Finishes,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is deleted.

183. Subsection 2404.2, “Location of Spray-Finishing Operations,” of Section 2404, “Spray Finishing,” of Chapter 24, “Flammable Finishes,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended by adding a new Paragraph 2404.2.1, “Prohibited Locations,” to read as follows:

“2404.2.1 Prohibited locations. Outside spraying or spray-finishing operations in basements or subbasements are prohibited except when approved by the *fire code official*.”

184. Subsection 2404.4, “Fire Protection,” of Section 2404, “Spray Finishing,” of Chapter 24, “Flammable Finishes,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“2404.4 Fire protection. New and existing s[§]pray booths and spray rooms shall be protected by an *approved* automatic fire-extinguishing system complying with Chapter 9. Protection shall also extend to exhaust plenums, exhaust ducts and both sides of dry filters when such filters are used.

2404.4.1 Fire extinguishers. Portable fire extinguishers complying with Section 906 shall be provided for spraying areas in accordance with the requirements for an extra (high) hazard occupancy.”

185. Subsection 2410.4, “Ignition Sources,” of Section 2410, “Floor Surfacing and Finishing Operations,” of Chapter 24, “Flammable Finishes,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“2410.4 Ignition sources. The power shall be shut down to all electrical sources of ignition within the flammable vapor area, unless those devices are classified for use in Class I, Division 1 hazardous locations. Open-flame devices and electrical equipment not classified for use in Class I locations, as defined in the *Dallas Electrical Code*, shall not be operated during or within four hours of the application of flammable or combustible liquids.”

186. Paragraph 2703.12.3, “Alarm Signals,” of Subsection 2703.12, “Emergency Alarm System,” of Section 2703, “General Safety Provisions,” of Chapter 27, “Semiconductor Fabrication Facilities,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“2703.12.3 Alarm signals. Activation of the emergency alarm system shall sound a local alarm and transmit a signal to the *emergency control station*. The alarm shall be both visual and audible and shall provide warning both inside and outside the area where the hazard is detected. The audible alarm shall be distinct from all other alarms.”

187. Chapter 31, “Tents, Temporary Special Event Structures and Other Membrane Structures,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is retitled as Chapter 31, “Exhibition Halls, Tents, Temporary Special Event Structures and Other Membrane Structures.”

188. Subsection 3103.2, “Approval Required,” of Section 3103, “Temporary Tents and Membrane Structures,” of Chapter 31, “Exhibition Halls, Tents, Temporary Special Event Structures and Other Membrane Structures,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3103.2 Approval required. *Tents, ~~and~~ membrane structures, and canopies* having an area in excess of 399[400] square feet (37 m²) shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the *fire code official*. Site plans shall be submitted at least 15 days before the event for review and approval by the fire code official.

Exceptions:

1. *Tents* used exclusively for recreational camping purposes.
2. Fabric canopies and ~~t~~[~~T~~]ents open on all sides that comply with all of the following:
 - 2.1. Individual *tents and canopies* having a maximum size of 700 square feet (65 m²).

- 2.2. The aggregate area of multiple *tents or canopies* placed side by side without a fire break clearance of 12 feet (3658 mm) not exceeding 700 square feet (65 m²) total.
- 2.3. A minimum clearance of 12 feet (3658 mm) to all structures and other *tents or canopies*.
3. Awnings.
4. Tents or canopies having an occupant load of less than 10 persons.
5. Tents, membrane structures, and canopies required to be issued by the building official.”

189. Paragraph 3103.3.1, “Special Amusement Area,” of Subsection 3103.3, “Outdoor Assembly Event,” of Section 3103, “Temporary Tents and Membrane Structures,” of Chapter 31, “Exhibition Halls, Tents, Temporary Special Event Structures and Other Membrane Structures,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is deleted.

190. Subsection 3107.2, “Combustible Materials,” of Section 3107, “Operational Requirements,” of Chapter 31, “Exhibition Halls, Tents, Temporary Special Event Structures and Other Membrane Structures,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3107.2 Combustible materials. Hay, straw, shavings or similar combustible materials shall not be located within any *tent* or *membrane structure* containing an assembly occupancy, except the materials necessary for the daily feeding and care of animals. Sawdust and shavings utilized for a public performance or exhibit shall not be prohibited provided the sawdust and shavings are kept damp. Combustible materials shall not be permitted under stands or seats at any time.

Exception: Hay, straw and similar combustible materials treated with a flame retardant in an approved manner when approved by the fire code official.”

191. Subsection 3107.3, “Smoking,” of Section 3107, “Operational Requirements,” of Chapter 31, “Exhibition Halls, Tents, Temporary Special Event Structures and Other

Membrane Structures,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3107.3 Smoking. Smoking shall not be permitted in *tents or membrane structures, or in adjacent areas where hay, straw, sawdust or other combustible materials are stored or used.* *Approved* “No Smoking” signs shall be conspicuously posted in accordance with Section 310.”

192. Subsection 3107.4, “Open or Exposed Flame,” of Section 3107, “Operational Requirements,” of Chapter 31, “Exhibition Halls, Tents, Temporary Special Event Structures and Other Membrane Structures,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3107.4 Open or exposed flame. Open flame or other devices emitting flame, fire or heat or any *flammable or combustible liquids*, gas, charcoal or other cooking device or any other unapproved devices shall not be permitted inside or located within 20 feet (6096 mm) of the *tent canopy or membrane structures* while open to the public unless *approved* by the *fire code official*. When *approved*, cooking devices shall be located so there is a separation of 4 feet (1219 mm) between the flame and the tent, canopy or membrane structure material.”

193. Paragraph 3107.12.5, “Cooking Tents,” of Subsection 3107.12, “Heating and Cooking Equipment,” of Section 3107, “Operational Requirements,” of Chapter 31, “Exhibition Halls, Tents, Temporary Special Event Structures and Other Membrane Structures,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3107.12.5 Cooking tents. *Tents* with sidewalks or drops where cooking is performed shall be separated from other *tents or membrane structures* by not less than of 20 feet (6096 mm). Cooking equipment shall be located so there is a separation of 4 feet (1219 mm) between the flame and the tent, canopy or membrane structure material.”

194. Subsection 3107.13, “LP-Gas,” of Section 3107, “Operational Requirements,” of Chapter 31, “Exhibition Halls, Tents, Temporary Special Event Structures and Other Membrane Structures,” of Part IV, “Special Occupancies and Operations,” of the 2021

International Fire Code is amended by adding a new Paragraph 3107.13.4, “Places of Exhibition,” to read as follows:

“3107.13.4 Places of exhibition. The operator of and exhibitors at premises used as a place of exhibition may use LP-gas inside a structure if:

1. The use is *approved* by the *fire code official* in writing; or
2. The use satisfies the requirements of Chapter 61 of this code and, when applied inside Fair Park, satisfies the requirements of Section 32-19 of the *Dallas City Code*.

3107.13.4.1 Capacity. When used inside structures, LP-gas containers shall not exceed a water capacity greater than 12 pounds (5 kg).”

195. Paragraph 3107.14.3, “Refueling,” of Subsection 3107.14, “Flammable and Combustible Liquids,” of Section 3107, “Operational Requirements,” of Chapter 31, “Exhibition Halls, Tents, Temporary Special Event Structures and Other Membrane Structures,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3107.14.3 Refueling. Refueling shall be performed in an *approved* location not less than 20 feet (6096 mm) from *tents, canopies, or membrane structures*. Fuel tanks shall be of adequate capacity to permit uninterrupted operation during normal operating hours. Refueling in a place of assembly shall be conducted only when the equipment is not in use and shall be approved by the *fire code official*.”

196. Chapter 31, “Exhibition Halls, Tents, Temporary Special Event Structures and Other Membrane Structures,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended by adding a new Section 3108, “Exhibition Halls,” to read as follows:

“SECTION 3108 EXHIBITION HALLS

3108.1 General. No display or exhibit shall be installed or operated in a manner that would interfere in any way with access to any required exit or with visibility of any required exit or any required exit sign, nor shall any display block access to fire-fighting equipment or fire alarm notification appliance.

3108.1.1 Lessee notification. The operator of premises used as a place of exhibition shall notify each lessee and the person in charge of the lessee’s proposed exhibition of the requirements of this section at the time the lease is made.

3108.1.2 Description and plans. Two copies of accurately-scaled floor plans are required to be submitted to the *fire code official* for approval at least 15 days prior to the move-in of any exhibit. No exhibition shall occupy any facility without approved plans. The plans shall include a detailed description of the nature of the exhibit and the following information:

1. Exhibit layout.
2. Aisles.
3. Exits.
4. Exhibits.
5. Show decorator’s booth.
6. Location and nature of the fire-extinguishing equipment.
7. Dates of show preparation.
8. Dates when open to public or trade.

3108.1.3 Compliance with plans. The exhibit shall be constructed, operated and maintained in accordance with this code and the *approved* plans.

3108.2 Structures within structures. The operator of a premises used as a place of exhibition where a structure is to be erected within another structure as a display shall submit to the *fire code official* two copies of accurately scaled plans and two lists of materials to be used in the construction to determine the fire protection requirements.

3108.3 Storage of combustible containers. Combustible materials not on display, including combustible packing crates used to ship exhibitors’ supplies and products, shall be stored:

1. In a location separated from the exhibit area by a 1-hour fire-resistive barrier;
2. In an area protected by an automatic sprinkler system; or
3. Otherwise isolated and secured in a manner adequate to provide safety from fire.

3108.4 Liquefied petroleum gas inside structures. The operator of and exhibitors at premises used as a place of exhibition may use LP-gas inside a structure if:

1. The use is *approved* by the *fire code official* in writing; or
2. The use satisfies the requirements of Chapter 61 and, when applied inside Fair Park, satisfies the requirements of Section 32-19 of the *Dallas City Code*.
3. When allowed, a single container shall not exceed a water capacity of 12 pounds (5 kg).

3108.5 Flammable and combustible liquids and compressed flammable gas prohibited. Flammable and combustible liquids, compressed flammable gas and other similar hazardous materials are prohibited within a place of exhibition.

Exception: The *fire code official* may permit limited use of the above prohibited materials under special circumstances.

3108.6 Smoking and open flames. The operator of premises used as a place of exhibition shall do the following:

1. Conspicuously post and maintain signs stating “NO SMOKING” in areas designated by the *fire code official*.
2. Provide and maintain noncombustible ashtrays in areas where smoking is not prohibited by the *fire code official*.
3. Prohibit the use of open flames, burning or smoke-emitting materials as part of an act, display or show without approval of the *fire code official*.

3108.7 Combustible waste. The operator of premises used as a place of exhibition shall do the following:

1. Provide and maintain approved containers for the collection and storage of combustible waste.
2. Collect combustible waste as it accumulates.
3. Remove the contents of waste containers at least once each day.

3108.8 Cooking appliances. The operator of and exhibitors at premises used as a place of exhibition may use cooking appliances if the appliances are:

1. Equipped with ventilating hoods or other equipment when required by the *fire code official*;
2. Installed in a manner satisfying the requirements of the *Dallas Plumbing Code* and *Dallas Mechanical Code*; and
3. Separated from combustible materials by an unobstructed spatial separation adequate to maintain surface temperature of adjacent combustibles below 160°F (71°C) or by metal or another approved guard adequate to maintain the same heat control.

3108.9 Gas fired heating units. The operator of premises used as a place of exhibition shall prohibit the use of gas-fired heating units unless specifically *approved* by the mechanical or plumbing inspector and the *fire code official*.

3108.10 Sawdust and shavings. The operator of premises used as a place of exhibition shall keep sawdust and shavings flameproofed.

3108.11 Hay and straw. The operator of premises used as a place of exhibition shall store and maintain hay and straw in a manner approved by the *fire code official*.

3108.12 Flameproof materials. The operator of a premise used as a place of exhibition shall prevent:

1. The use of tents, awnings, curtains, drapes, decorations and similar items; or
2. The hanging of materials, merchandise, signs and similar items over or in booth enclosures.

Exception: Noncombustible or flameproof items may be used or hung.

3108.13 Vehicles. Liquid- or gas-fueled vehicles, boats or other motorcraft shall not be located indoors unless:

1. Batteries are disconnected.
2. Fuel in fuel tanks does not exceed the lesser of one-quarter tank or 5 gallons (19 L). Fuel tank levels shall be inspected and *approved* by the *fire code official* prior to locating the vehicles or equipment indoors.
3. Fuel tanks and fill openings are closed and sealed to prevent tampering.

4. Vehicles, boats or other motorcraft equipment are not fueled or defueled within the building.
5. Fuel systems are inspected for leaks.
6. The location of vehicles or equipment does not block or obstruct means of egress.
7. Fuel for the vehicle or equipment is stored in approved containers in an approved location outside of the building.
8. Fuel spills are cleaned up immediately.
9. Refueling is performed outside of the building at an approved site.
10. Keys to all vehicles, boats or other motorcraft are maintained at the display site and available for use by the *fire code official*.

Electric and hybrid vehicles on display shall be safeguarded per the vehicle manufacturer's written directions."

197. Footnote h of Table 3206.2, "General Fire Protection and Life Safety Requirements," of Section 3206, "General Fire Protection and Life Safety Features," of Chapter 32, "High-Piled Combustible Storage," of Part IV, "Special Occupancies and Operations," of the 2021 International Fire Code is amended to read as follows:

"h. ~~[Not required w]~~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 (meters-seconds)^{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 are required within these areas."

198. Paragraph 3206.3.1, "Size of High-Piled Storage Area," of Subsection 3206.3, "High-Piled Storage Areas," of Section 3206, "General Fire Protection and Life Safety Features," of Chapter 32, "High-Piled Combustible Storage," of Part IV, "Special Occupancies and Operations," of the 2021 International Fire Code is amended by adding Subparagraph 3206.3.1.1, "High Hazard High-Piled Storage Areas," to read as follows:

“3206.3.1.1 High hazard high-piled storage areas. 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 *Dallas Building Code* shall be used to divide high-piled storage exceeding 500,000 square feet in area.”

199. Subsection 3207.2, “Fire Protection,” of Section 3207, “Solid-Piled and Shelf Storage,” of Chapter 32, “High-Piled Combustible Storage,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3207.2 Fire protection. Where automatic sprinklers are required by Table 3206.2, an *approved automatic sprinkler system* shall be installed throughout the building or to 2 [4]-hour *fire barriers* constructed in accordance with Section 707 of the *Dallas* [~~International~~] *Building Code*. Openings in such *fire barriers* shall be protected by opening protectives having a 1.5-hour *fire protection rating*. The design and installation of the *automatic sprinkler system* and other applicable fire protection shall be in accordance with the *Dallas* [~~International~~] *Building Code* and NFPA 13.

3207.2.1 Shelf storage. Shelf storage greater than 12 feet (3658 mm) but less than 15 feet (4572 mm) in height shall be in accordance with the fire protection requirements set forth in NFPA 13. Shelf storage 15 feet (4572 mm) or more in height shall be protected in an *approved* manner with special fire protection, such as in-rack sprinklers.”

200. Subsection 3208.2, “Fire Protection,” of Section 3208, “Rack Storage,” of Chapter 32, “High-Piled Combustible Storage,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3208.2 Fire protection. Where automatic sprinklers are required by Table 3206.2, an *approved automatic sprinkler system* shall be installed throughout the building or to 2 [4]-hour *fire barriers* constructed in accordance with Section 707 of the *Dallas* [~~International~~] *Building Code*. Openings in such *fire barriers* shall be protected by opening protectives having a 1.5-hour *fire protection rating*. The design and installation of the *automatic sprinkler system* and other applicable fire protection shall be in accordance with Section 903.3.1.1 and the *Dallas* [~~International~~] *Building Code*.”

3208.2.1 Plastic shelves. Storage on plastic shelves shall be protected by *approved* specially engineered *fire protection systems*.

3208.2.2 Racks with solid shelving. Racks with solid shelving having an area greater than 20 square feet (1.9 m²), measured between *approved* flue spaces at all four edges of the shelf, shall be in accordance with this section.

Exceptions:

1. Racks with mesh, grated, slatted or similar shelves having uniform openings not more than 6 inches (152 mm) apart, comprising not less than 50 percent of the overall shelf area, and with *approved* flue spaces are allowed to be treated as racks without solid shelves.
2. Racks used for the storage of combustible paper records, with solid shelving, shall be in accordance with NFPA 13.

3208.2.2.1 Fire protection. Fire protection for racks with solid shelving shall be in accordance with NFPA 13.”

201. Subsection 3311.1, “Required Access,” of Section 3311, “Access for Fire Fighting,” of Chapter 33, “Fire Safety During Construction and Demolition,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3311.1 Required access. *Approved* vehicle access for fire fighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 50 [100] feet (15 240 [30-480] 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, they shall be approved by the fire code official prior to the time of which construction has progressed beyond completion of the foundation of the structure. Construction material shall not block access to buildings, hydrants or fire appliances. Wherever the fire department connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an approved sign.”

202. Subsection [BE] 3312.1, “Stairways Required,” of Section 3312, “Means of Egress,” of Chapter 33, “Fire Safety During Construction and Demolition,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“[BE] 3312.1 Stairways required. Where building construction exceeds 35 [40] feet (10 668 [12-192] mm) in height above the lowest level of fire department vehicle access, a temporary or permanent lighted *stairway* shall be provided. As construction progresses, such *stairway*

shall be extended to within one floor of the highest point of construction having secured decking or flooring.”

203. Subsection 3314.1, “Where Required,” of Section 3314, “Standpipes,” of Chapter 33, “Fire Safety During Construction and Demolition,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3314.1 Where required. Buildings four or more stories in height shall be provided with not less than one standpipe for use during construction. ~~[In buildings required to have standpipes by Section 905.3.1, not less than one standpipe shall be provided for use during construction.]~~ Such standpipes shall be installed prior to construction exceeding 35 [40] feet (10 668 [12 192] mm) in height above the lowest level of fire department vehicle access. Such standpipes shall be provided with fire department hose connections at locations adjacent to *stairways* complying with Section 3312.1. Such standpipes, wet or dry, shall be monitored for damage by a waterflow or pressure switch (10 psi minimum) and audible alarm. As construction progresses, such standpipes shall be extended to within one floor of the highest point of construction having secured decking or flooring.”

204. Section 3409, “Indoor Storage Arrangement,” of Chapter 34, “Tire Rebuilding and Tire Storage,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“SECTION 3409 INDOOR STORAGE ARRANGEMENT

3409.1 Pile dimensions less than 6 feet in height. Where tires are stored on-tread, the dimension of the pile in the direction of the wheel hole shall be not more than 50 feet (15 240 mm). Tires stored adjacent to or along one wall shall not extend more than 25 feet (7620 mm) from that wall. Other piles shall be not more than 50 feet (15 240 mm) in width.

3409.2 Pile dimensions 6 feet in height or greater. Where tires are stored in piles 6 feet (1829 mm) in height or greater, storage shall comply with Chapter 32.”

205. Subsection 3502.1, “Definitions,” of Section 3502, “Definitions,” of Chapter 35, “Welding and Other Hot Work,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3502.1 Definitions. The following words and terms are defined in Chapter 2:

HOT WORK.

HOT WORK AREA.

HOT WORK EQUIPMENT.

HOT WORK PERMITS.

~~[HOT WORK PROGRAM.]~~

~~[RESPONSIBLE PERSON.]~~

TORCH-APPLIED ROOF SYSTEM.”

206. Subsection 3503.3, “Hot Work Program Permit,” of Section 3503, “General Requirements,” of Chapter 35, “Welding and Other Hot Work,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is deleted.

207. Paragraph 3504.2.1, “When Required,” of Subsection 3504.2, “Fire Watch,” of Section 3504, “Fire Safety Requirements,” of Chapter 35, “Welding and Other Hot Work,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3504.2.1 When required. A fire watch shall be provided during hot work activities and shall continue for not less than 30 minutes after the conclusion of the work. The *fire code official* [~~–or the responsible manager under a hot work program,~~] is authorized to extend the fire watch based on the hazards or work being performed.

Exception: Where the hot work area has no fire hazards or combustible exposures.”

208. Subsection 3504.3, “Area Reviews,” of Section 3504, “Fire Safety Requirements,” of Chapter 35, “Welding and Other Hot Work,” of Part IV, “Special

Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3504.3 Area reviews. Before hot work is conducted ~~[permitted]~~ and not less than once per day ~~[while the permit is in effect]~~, the area shall be inspected by the individual responsible for ~~the~~ [authorizing] hot work operations to ensure that it is a fire safe area. ~~[Information shown on the permit shall be verified prior to signing the permit in accordance with Section 105.6.]”~~

3504.3.1 Pre-hot-work check. A pre-hot-work check shall be conducted prior to work to ensure that all equipment is safe and hazards are recognized and protected. A report of the check shall be kept at the work site during the work and available upon request. The pre-hot-work check shall determine all of the following:

1. Hot work equipment to be used shall be in satisfactory operating condition and in good repair.
2. Hot work site is clear of combustibles or combustibles are protected.
3. Exposed construction is of noncombustible materials or, if combustible, then protected.
4. Openings are protected.
5. Floors are kept clean.
6. Exposed combustibles are not located on the opposite side of partitions, walls, ceilings or floors.
7. Fire watches, where required, are assigned.
8. *Approved* actions have been taken to prevent accidental activation of fire protection system equipment in accordance with Sections 3504.1.8 and 3504.1.9.
9. Fire extinguishers and fire hoses (where provided) are operable and available.”

209. Subsection 3505.5, “Remote Locations,” of Section 3505, “Gas Welding and Cutting,” of Chapter 35, “Welding and Other Hot Work,” of Part IV, “Special Occupancies and Operations,” of the 2021 International Fire Code is amended to read as follows:

“3505.5 Remote locations. Oxygen and fuel-gas cylinders and acetylene generators shall be located away from the hot work area to prevent such cylinders or generators from being heated by radiation from heated materials, sparks or slag, or misdirection of the torch flame. Portable oxygen/fuel gas welding equipment located inside buildings shall be stored in a well-ventilated, dry location at least 20 feet (6096 mm) from combustible material and away from elevators, stairs, gangways or means of egress.”

210. Subsection 5001.5, “Permits,” of Section 5001, “General,” of Chapter 50, “Hazardous Materials—General Provisions,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended by adding a new Paragraph 5001.5.3, “Plan Review,” to read as follows:

“5001.5.3 Plan review. Plans detailing outdoor storage, dispensing, use and handling of hazardous materials must be submitted for review and approval to the *fire code official*. Plans must include the following:

1. Amounts of hazardous materials involved.
2. Safety data sheets on all materials involved.
3. Location on property.
4. Property lines.
5. Buildings and structures.
6. Fire apparatus access roads.
7. Fire hydrants.
8. Manufacturer’s specifications on all equipment involved (tanks, dispensers, pumps, etc.).
9. Process description.

5001.5.3.1 Plan review fees. Plans for hazardous materials shall be accompanied by a nonrefundable \$200.00 review fee.”

211. Subsection 5003.12, “Outdoor Control Areas,” of Section 5003, “General Requirements,” of Chapter 50, “Hazardous Materials—General Provisions,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5003.12 Outdoor control areas. *Outdoor control areas* for hazardous materials in amounts not exceeding the maximum allowable quantity per outdoor control area shall be in accordance with the following general requirements:

1. *Outdoor control area* shall be kept free from weeds, debris and common combustible materials not necessary to the storage. The area surrounding an *outdoor control area* shall be kept clear of such materials for not less than 15 feet (4572 mm).
2. *Outdoor control areas* shall be located not closer than 20 feet (6096 mm) from a public street, public alley, *public way* or *lot line* that can be built on.

Exceptions:

1. For solid and liquid hazardous materials, a 2-hour *fire-resistance-rated* wall without openings extending not less than 30 inches (762mm) above and to the sides of the storage area shall be allowed in lieu of such distance.
2. For *compressed gas* hazardous materials, unless otherwise specified, the minimum required distances shall not apply where *fire barriers* without openings or penetrations having a minimum *fire-resistance rating* of 2 hours interrupt the line of sight between the storage and the exposure. The configuration of the *fire barrier* shall be designed to allow natural ventilation to prevent the accumulation of hazardous gas concentrations.
3. Where a property exceeds 10,000 square feet (929 m²), a group of two *outdoor control areas* is allowed where *approved* and where each control area is separated by a minimum distance of 50 feet (15 240mm).
4. Where a property exceeds 35,000 square feet (3252 m²), additional groups of *outdoor control areas* are allowed where *approved* and where each group is separated by a minimum distance of 300 feet (91 440 mm).
5. Outdoor storage of hazardous materials shall be provided with fire department access and fire hydrant availability in accordance with Chapter 5.”

212. Paragraph 5005.4.4, “Dispensing, Use and Handling,” of Subsection 5005.4, “Handling,” of Section 5005, “Use, Dispensing and Handling,” of Chapter 50, “Hazardous Materials—General Provisions,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5005.4.4 Dispensing, use and handling. Where hazardous materials having a hazard ranking of 3 or 4 in accordance with NFPA 704 are transported through *corridors*, interior *exit stairways* or *ramps* or *exit passageways*, there shall be an emergency telephone system, a local manual alarm station or an *approved* alarm-initiating device at not more than 150-foot (45 720 mm) intervals and at each *exit* and *exit access* doorway throughout the transport route. The signal shall be relayed to an *approved* central, proprietary or remote station service or constantly attended on-site location and shall also initiate a local, visual, and audible alarm. The alarm shall provide warning both inside and outside the area where the hazard is detected. The audible alarm shall be distinct from all other alarms.”

213. Subsection 5306.2, ‘Interior Supply Location,’ of Section 5306, “Medical Gasses,” of Chapter 53, “Compressed Gases,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5306.2 Interior supply location. Medical gases shall be located in areas dedicated to the storage of such gases without other storage or uses. Where containers of medical gases in quantities greater than the exempt [~~permit~~] amount are located inside buildings, they shall be in a 1-hour exterior room, a 1-hour interior room or a gas cabinet in accordance with Section 5306.2.1, 5306.2.2 or 5306.2.3, respectively. Rooms or areas where medical gases are stored or used in quantities exceeding the *maximum allowable quantity per control area* as set forth in Section 5003.1 shall be in accordance with the Dallas [~~International~~] *Building Code* for high-hazard Group H occupancies.

5306.2.1 One-hour exterior rooms. A 1-hour exterior room shall be a room or enclosure separated from the remainder of the building by *fire barriers* constructed in accordance with Section 707 of the Dallas [~~International~~] *Building Code* or *horizontal assemblies* constructed in accordance with Section 711 of the Dallas [~~International~~] *Building Code*, or both, with a *fire-resistance rating* of not less than 1 hour. Openings between the room or enclosure and interior spaces shall be self-closing smoke- and draft-control assemblies having a *fire protection rating* of not less than 1 hour. Rooms shall have not less than one exterior wall that is provided with not less than two vents. Each vent shall have a minimum free opening area of 36 square inches (232 cm²) for each 1,000 cubic feet (28 m³) at *normal temperature and pressure* (NTP) of gas stored in the room and shall be not less than 72 square inches (465 cm²) in aggregate free opening area. One vent shall be within 6 inches (152 mm) of the floor and one shall be within 6 inches (152 mm) of the

ceiling. Rooms shall be provided with not less than one automatic sprinkler to provide container cooling in case of fire.

5306.2.2 One-hour interior room. Where an exterior wall cannot be provided for the room, a 1-hour interior room shall be provided and shall be a room or enclosure separated from the remainder of the building by *fire barriers* constructed in accordance with Section 707 of the Dallas [~~International~~] *Building Code* or *horizontal assemblies* constructed in accordance with Section 711 of the Dallas [~~International~~] *Building Code*, or both, with a *fire-resistance rating* of not less than 1 hour. Openings between the room or enclosure and interior spaces shall be provided with self-closing, smoke- and draft-control assemblies having a *fire protection rating* of not less than 1 hour. An *automatic sprinkler system* shall be installed within the room. The room shall be exhausted through a duct to the exterior. Supply and exhaust ducts shall be enclosed in a 1-hour-rated shaft enclosure from the room to the exterior. *Approved* mechanical ventilation shall comply with the Dallas [~~International~~] *Mechanical Code* and be provided at a minimum rate of 1 cfm per square foot [$0.00508 \text{ m}^3/(\text{s} \times \text{m}^2)$] of the area of the room.

5306.2.3 Gas cabinets. Gas cabinets shall be constructed in accordance with Section 5003.8.6 and shall comply with the following:

1. Exhausted to the exterior through dedicated exhaust duct system installed in accordance with Chapter 5 of the Dallas [~~International~~] *Mechanical Code*.
2. Supply and exhaust ducts shall be enclosed in a 1-hour *fire-resistance-rated* shaft enclosure from the cabinet to the exterior. The average velocity of ventilation at the face of access ports or windows shall be not less than 200 feet per minute (1.02 m/s) with not less than 150 feet per minute (0.76 m/s) at any point of the access port or window.
3. Provided with an *automatic sprinkler system* internal to the cabinet.

214. Subsection 5601.1, “Scope,” of Section 5601, “General,” of Chapter 56, “Explosives and Fireworks,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5601.1 Scope. The provisions of this chapter shall govern the possession, manufacture, storage, handling, transportation, sale and use of *explosives*, *explosive materials*, fireworks and small arms ammunition.

Exceptions:

1. The Armed Forces of the United States, Coast Guard or National Guard.
2. *Explosives* in forms prescribed by the official United States Pharmacopoeia.
3. The possession, storage, transportation and use of small arms ammunition where packaged in accordance with DOTn packaging requirements.
4. The possession, storage, transportation and use of not more than 1 pound (0.454 kg) of commercially manufactured sporting black powder, 20 pounds (9 kg) of smokeless powder and 10,000 small arms primers for hand loading of small arms ammunition for personal consumption.
5. The transportation and use of *explosive materials* by federal, state and local regulatory, law enforcement and fire agencies acting in their official capacities.
6. Special industrial *explosive* devices that in the aggregate contain less than 50 pounds (23 kg) of *explosive materials*.
7. The possession, storage, transportation and use of blank industrial-power load cartridges where packaged in accordance with DOTn packaging regulations.
8. Transportation in accordance with DOTn 49 CFR Parts 100-185.
9. Items preempted by federal regulations.

5601.1.1 Explosive material standard. In addition to the requirements of this chapter, NFPA 495 shall govern the manufacture, transportation, storage, sale, handling and use of *explosive materials*.

5601.1.2 Explosive material terminals. In addition to the requirements of this chapter, the operation of *explosive material* terminals shall conform to the provisions of NFPA 498.

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

Exceptions:

1. The display, s[S]torage, transportation and handling of fireworks when approved and permitted as provided [allowed] in Section 5604.

2. ~~[Manufacture, assembly and testing of fireworks as allowed in Section 5605.~~

3.]The use of fireworks for approved fireworks displays as allowed in Section 5608.

~~[4. The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided that such fireworks and facilities comply with the 2006 edition of NFPA 1124, CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR Parts 100-185, as applicable for consumer fireworks]~~

5601.1.4 Rocketry. The storage, handling and use of model and high-power rockets shall comply with the requirements of NFPA 1122, NFPA 1125 and NFPA 1127.

5601.1.5 Ammonium nitrate. The storage and handling of ammonium nitrate shall comply with the requirements of NFPA 400 and Chapter 63.

Exception: Storage of ammonium nitrate in magazines with blasting agents shall comply with the requirements of NFPA 495.”

215. Section 5608, “Fireworks Display,” of Chapter 56, “Explosives and Fireworks,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

**“SECTION 5608
FIREWORKS DISPLAY AND PYROTECHNIC
SPECIAL EFFECTS MATERIAL**

5608.1 General. The display, transportation and temporary storage of fireworks, including proximate audience displays ~~[Outdoor fireworks displays, use of pyrotechnics before a proximate audience]~~and pyrotechnic special effects in motion picture, television, theatrical and group entertainment productions, shall be in accordance ~~[comply]~~ with Section[s] 5608, [5608.2 through 5608.10 and] NFPA 1123 or NFPA 1126, Chapter 2154 of the Texas Occupations Code, and the Texas Fireworks Rules.

5608.1.1 Jurisdiction. This chapter applies within:

1. The corporate limits of the city of Dallas; and
2. The area immediately adjacent and contiguous to the Dallas city limits and extending outside the city limits for a distance of 5,000 feet (1520 m), unless such area is within the corporate limits of another city.

5608.1.2 Public nuisance and seizure. The presence of fireworks within the jurisdiction of the city of Dallas in violation of this chapter is declared to be a common and public nuisance. The fire code official shall seize, remove or cause to be removed at the expense of the owner all stocks of fireworks offered or exposed for sale, stored or held in violation of this chapter and cause the fireworks to be safely destroyed. It is not necessary to obtain injunctive relief as a prerequisite to seizure and destruction of illegal fireworks.

5608.1.3 Prohibition. It shall be unlawful for any person to possess, use, manufacture, sell, offer for sale, give away, transport or discharge fireworks of any description.

Exception: The use of fireworks for display is allowed as set forth in Section 5608.

5608.1.4 Smoking and open flames. Smoking and use of open flames are prohibited in the aerial shell storage area. “NO SMOKING OR OPEN FLAME” signs shall be conspicuously posted.

5608.2 Permits [application]. Permits are required to conduct fireworks and pyrotechnic displays in accordance with Section 105.6. The permit application shall be submitted to the fire code official for approval at least 15 days prior to the scheduled date of the display. Prior to issuing permits for fireworks display, plans for the display, inspections of the display site and demonstrations of the display operations shall be *approved*. A plan establishing procedures to follow and actions to be taken in the event that a shell fails to ignite in, or discharge from, a mortar or fails to function over the fallout area or other malfunctions shall be provided to the fire code official.

5608.2.1 Outdoor fireworks displays. In addition to the requirements of Section 403, permit applications for outdoor fireworks displays using Division 1.3G fireworks shall include: ~~[a diagram of the location at which the fireworks display will be conducted, including the site from which fireworks will be discharged; the location of buildings, highways, overhead obstructions and utilities; and the lines behind which the audience will be restrained.]~~

1. Site plans prepared by the display operator, sponsor or both.
2. A site diagram of the display site drawn to scale which shall include identifying significant ground features, public rights of way, significant buildings or structures, overhead obstructions, location of nearby trees, telegraph or telephone lines, parking areas and spectator viewing areas at which the display will be conducted. The site diagram shall also include the site from which fireworks will be discharged and the lines behind which the audience will be restrained.
3. The location of fireworks storage areas.

4. The fallout area, including dimensions.
5. A north arrow.
6. Likely wind direction.
7. The location of significant roadways and utilities including access and control points.
8. Traffic plans indicating the flow of vehicles into and out of the site before and after the display.
9. The location of emergency vehicle staging areas and access routes. At the time of permit application, the fire code official shall be consulted regarding requirements for standby fire apparatus.
10. Diagrams illustrating the general arrangement and size of mortars and the location of shell storage at the discharge site. The diagrams should include the location of the electrical firing unit.
11. The Texas Department of Insurance application for permit and site certification and a copy of the state permit once approved by the Texas Department of Insurance.
12. A certificate of insurance as required in Section 5608.5.2.2.
13. A list of the amount and type of fireworks to be used.
14. A copy of the transportation route from the Dallas city limits to the display site.
15. A copy of the pyrotechnic operator's state license and picture identification.

5608.2.2 Use of pyrotechnics before a proximate audience. Where the separation distances required in Section 5608[-4] and NFPA 1123 are unavailable or cannot be secured, fireworks displays shall be conducted in accordance with NFPA 1126 for *proximate audiences*. Permits are required to conduct a special effects display in accordance with Section 105.6. Applications for use of pyrotechnics before a *proximate audience* shall include plans indicating the required clearances for spectators and combustibles, crowd control measures, smoke control measures and requirements for standby personnel and equipment where provision of such personnel or equipment is required by the *fire code official*. The permit application shall be made not less than 15 days prior to the scheduled date of the display. A rush fee of \$310.00 shall be required in the event the required

documentation and/or permit application is not submitted more than 15 days prior to the requested date of the display. In addition to the requirements of Section 403, permit applications for special effects pyrotechnic material using Division 1.4G fireworks shall include:

1. The name of the person, group or organization sponsoring the production.
2. The date and time of day of the production.
3. The exact location of the production.
4. The name of the pyrotechnic operator.
5. The number, names and ages of all assistants who are to be present.
6. The qualifications of the pyrotechnic operator.
7. The pyrotechnic experience of the operator.
8. Confirmation of any applicable state and federal licenses held by the operator or assistants.
9. Evidence of the permittee's insurance carrier or financial responsibility.
10. The number and type of pyrotechnic devices and materials to be used, the operator's experience with those devices and effects, and a definition of the general responsibility of the assistants.
11. A diagram of the grounds of the facilities where the production is to be held. This diagram shall show the point at which the pyrotechnic devices are to be fired, the fallout radius for each pyrotechnic device used in the performance, and the lines behind which the audience shall be restrained.
12. The point of on-site assembly of pyrotechnic devices.
13. The manner and place of storage of the pyrotechnic materials and devices.
14. The safety data sheet (SDS) for the pyrotechnic materials to be used.
15. Certification that the set, scenery and rigging materials are inherently flame retardant or have been treated to achieve flame retardancy.
16. Certification that all materials worn by performers in the fallout area during use of pyrotechnic effects shall be inherently flame retardant or have been treated to achieve flame retardancy.

5608.2.2.1 Pyrotechnics demonstration. The fire code official shall approve a walkthrough and a representative demonstration of the pyrotechnics. The demonstration

shall be scheduled with sufficient time allowed to reset/reload the pyrotechnics before the arrival of the audience.

Exception: The fire code official shall be permitted to waive this requirement based upon past history, prior knowledge and other factors, provided the authority is confident that the discharge of pyrotechnics can be conducted safely.

5608.2.3 Pyrotechnic special effects material. A display permit is required to use pyrotechnic special effects material in accordance with Section 105.6. A permit for use shall be granted only to a pyrotechnic operator licensed by the State of Texas.

5608.2.4 Transportation and storage. A permit is required for the transportation and storage of fireworks in accordance with Section 105.6.

5608.2.5 Manufacturing. The manufacturing of fireworks is prohibited except under special permits as required by local and state regulations.

5608.2.6 Refusal to issue permit. The fire code official shall refuse to approve issuance of a permit if the applicant:

1. Intentionally makes a false statement as to a material matter in the permit application;
2. Is a fugitive from justice;
3. Is under a felony indictment;
4. Has been finally convicted of a felony offense within the 5-year period immediately preceding the filing of the application;
5. Has been finally convicted of a misdemeanor violation of an explosive law or regulation within the 2-year period immediately preceding the filing of the application;
6. Held a permit issued under this chapter which was revoked within the 1-year period immediately preceding the filing of the application;
7. Has been adjudicated a mental defective; is an unlawful user of, or is addicted to, a controlled substance or dangerous drug; or suffers from any other handicap, infirmity, defect or condition which might reasonably diminish competency to safely conduct the proposed activity or would create an unreasonable risk of injury to life or property in the performance of the proposed activity;
8. Submits an application which indicates that the proposed display will not comply with the provisions of this chapter: or

9. Proposes a display which will create an unreasonable risk of injury to life or property in the performance of the proposed activity.

5608.3 Approved fireworks displays. *Approved* fireworks displays shall include only the *approved* fireworks 1.3G, fireworks 1.4G, fireworks 1.4S and pyrotechnic articles, 1.4G, which shall be handled by an *approved*, competent operator. The *approved* fireworks shall be arranged, located, discharged and fired in a manner that will not pose a hazard to property or endanger any person.

5608.3.1 Violations. A person who knowingly violates a provision of this chapter shall be fined not less than \$200 nor more than \$2000 for each offense.

5608.3.2 Separate offenses. A person who knowingly violates a provision of this chapter is guilty of a separate offense for:

1. Each separate package of fireworks, if the fireworks are packaged separately; and
2. Each day or part of a day during which the violation is committed, continued or permitted.

5608.3.3 Pyrotechnic operator. Fireworks display operations shall be under the direct supervision of a pyrotechnic operator. The pyrotechnic operator shall be responsible for all aspects of a display related to pyrotechnics.

5608.3.3.1 Bond. The permittee shall furnish a bond or certificate of insurance in an amount deemed adequate by the fire code official for the payment of damages which could be caused either to a person or persons or to property by reason of the permitted display and arising from acts of the permittee, agents, employees or subcontractors.

5608.3.4 Barriers. The *fire code official* is authorized to require rope barriers, fences, signs or other devices to be installed around the display area to aid in crowd control.

5608.3.5 Fire protection. When required by the *fire code official*, the pyrotechnic operator shall provide two or more portable fire extinguishers of the proper classification and size for the discharge area and shall be readily accessible while the pyrotechnics are being loaded, fired or prepared for firing. The pyrotechnic operator shall arrange for standby fire apparatus for protection down range when required by the *fire code official*.

5608.3.6 Monitors. The pyrotechnic operator shall employ monitors whose sole duty shall be the enforcement of crowd control around the display area. Unauthorized persons shall not be allowed to enter the discharge site until the site has been inspected after the display by the pyrotechnic operator.

5608.4 Clearance. Spectators, spectator parking areas, and *dwelling*s, buildings or structures shall not be located within the display site.

Exceptions:

1. This provision shall not apply to pyrotechnic special effects and fireworks displays using Division 1.4G materials before a *proximate audience* in accordance with NFPA 1126.
2. This provision shall not apply to unoccupied *dwelling*s, buildings and structures with the approval of the building *owner* and the *fire code official*.

5608.5 Storage, use and handling of fireworks ~~[at display site]~~. ~~[The s]~~ Storage, use and handling of fireworks ~~[at the display site]~~ shall be in accordance ~~[comply]~~ with ~~[the requirements of this s]~~ Sections 5604 and 5608, Chapter 2154 of the Texas Occupations Code, the Texas Fireworks Rules, NFPA 1123 or NFPA 1126.

Exceptions:

1. The use of fireworks by railroads or other transportation agencies for signaling or illumination.
2. The sale or use of blank cartridges for theatrics, signaling or ceremonial purposes.
3. The use of fireworks by the United States Armed Forces.

5608.5.1 Supervision and weather protection. Beginning as soon as fireworks have been delivered to the display site, they shall not be left unattended.

5608.5.2 Weather protection. Fireworks shall be kept dry after delivery to the display site.

5608.5.3 Inspection. Shells shall be inspected by the operator or assistants after delivery to the display site. Shells having tears, leaks, broken fuses or signs of having been wet shall be set aside and shall not be fired. Aerial shells shall be checked by the operator or assistants for proper fit in mortars prior to discharge. Aerial shells that do not fit properly shall not be fired. After the fireworks display, damaged, deteriorated or dud shells shall either be returned to the supplier or destroyed in accordance with the supplier's instructions and Section 5604.10.

Exception: Minor repairs to fuses shall be allowed. For electrically ignited displays, attachment of electric matches and similar tasks shall be allowed.

5608.5.4 Reserved. ~~[Sorting and separation.~~ ~~After delivery to the display site and prior to the fireworks display, all shells shall be separated according to their size and their designation as salutes.~~

Exception: ~~For electrically fired displays, or displays where all shells are loaded into mortars prior to the show, separation of shells according to their size or their designation as salutes is not required.]~~

5608.5.5 Reserved. ~~[Ready boxes. Display fireworks, 1.3G, that will be temporarily stored at the site during the fireworks display shall be stored in ready boxes located upwind and not less than 25 feet (7620 mm) from the mortar placement and separated according to their size and their designation as salutes.~~

~~**Exception:** For electrically fired fireworks displays, or fireworks displays where all shells are loaded into mortars prior to the show, separation of shells according to their size, their designation as salutes or for the use of ready boxes is not required.]~~

5608.6 Ground pieces. Ground pieces shall be located not less than 150 feet (45 720 mm) from spectators and vehicles; not less than 100 feet (30 480 mm) from tents, canopies or membrane structures; not less than 100 feet (30 480 mm) from mortars; and outside of the designated landing area.

Exceptions:

1. Fixed ground pieces are allowed not less than 75 feet (22 860 mm) from spectators and vehicles.
2. Electrically fired ground pieces are allowed in the designated landing area.
~~[**Installation of mortars.** Mortars for firing fireworks shells shall be installed in accordance with NFPA 1123 and shall be positioned so that shells are propelled away from spectators and over the fallout area. Mortars shall not be angled toward the spectator viewing area. Prior to placement, mortars shall be inspected for defects, such as dents, bent ends, damaged interiors and damaged plugs. Defective mortars shall not be used.]~~

5608.7 Reserved. ~~[**Handling.** Aerial shells shall be carried to mortars by the shell body. For the purpose of loading mortars, aerial shells shall be held by the thick portion of the fuse and carefully loaded into mortars.]~~

5608.8 Fireworks display supervision. Whenever in the opinion of the *fire code official* or the pyrotechnic operator a hazardous condition exists, such as a lack of crowd control or the crowd is in danger, the fireworks display shall be discontinued immediately until such time as the dangerous situation is corrected. If at any time high winds or wet weather creates a danger, the display shall be postponed until weather conditions are acceptable to the fire code official.

5608.9 Post-fireworks display inspection. After the fireworks display, the firing crew shall conduct an inspection of the fallout area for the purpose of locating unexploded aerial shells or live components. This inspection shall be conducted before public access to the site shall be allowed. Where fireworks are displayed at night and it is not possible to inspect the site thoroughly, the operator or designated assistant shall inspect the entire site at first light.

~~[A report identifying any shells that fail to ignite in, or discharge from, a mortar or fail to function over the fallout area or otherwise malfunction, shall be filed with the *fire code official*.]~~

5608.10 Disposal. Any shells found during the inspection required in Section 5608.9 shall not be handled until not less than 15 minutes have elapsed from the time the shells were fired. The fireworks shall then be doused with water and allowed to remain for not less than 5 additional minutes before being placed in a plastic bucket or fiberboard box. The disposal instructions of the manufacturer as provided by the fireworks supplier shall then be followed in disposing of the fireworks in accordance with Section 5604.10.

5608.11 Pyrotechnic special effects material. Temporary storage, use and handling of pyrotechnic special effects material used in motion picture, television, theatrical and group entertainment productions shall be in accordance with Sections 5608.2 through 5608.10. Permanent storage of pyrotechnic special effects material shall be in accordance with Section 5604.

5608.11.1 Classification of materials. Pyrotechnic special effects material shall be classified in accordance with U.S. Department of Transportation regulations and procedures.

Exception: Pyrotechnic special effects material which is manufactured on-site and which is in storage or use need not be classified.

5608.11.2 Construction of magazines. Magazines used for the storage of pyrotechnic special effects material shall be constructed in accordance with Section 5604.6.

5608.11.3 Storage. Storage of fireworks and pyrotechnic special effects material shall be in accordance with Sections 5608.11.3.1 through 5608.11.3.6.

5608.11.3.1 Fireworks 1.4G. Fireworks and all explosive material including Division 1.4G fireworks (class C common fireworks) shall be stored in accordance with the requirements for explosives in Section 5604 and Table 5604.3.

5608.11.3.2 Other pyrotechnic special effects material. Storage of pyrotechnic special effects material other than Division 1.4G fireworks (class C common fireworks) shall be in accordance with the requirements of Section 5604. Containers of explosive materials shall be closed when stored. For amounts and requirements for indoor and outdoor storage see Section 5604.

5608.11.3.3 Storage against walls. Explosive materials within a magazine shall not be placed directly against interior walls and shall not interfere with ventilation. To prevent contact of stored explosive materials with walls, a nonsparking lattice-work or other nonsparking material is allowed to be used.

5608.11.3.4 Marking of containers. Containers of explosive materials shall be stored such that identifying marks are visible. Stocks of explosive materials shall be stored so they can be easily counted and checked upon inspection.

5608.11.3.5 Unpacking and repacking containers. Containers of explosive materials shall not be unpacked or repacked inside a magazine or within 50 feet (15 240 mm) of a magazine, and shall not be unpacked or repacked close to other explosive materials.

Exception: Unpacking and repacking of fiberboard and other nonmetallic containers.

5608.11.3.6 Tools. Tools used for opening or closing containers of explosive materials shall be of non-sparking materials. A wood wedge and a fiber, rubber or wooden mallet shall be used for opening or closing wood containers of explosive materials. Metal tools, other than non-sparking transfer conveyors, shall not be stored in magazines containing high explosives.

Exception: Metal slitters are allowed to be used for opening fiberboard containers.

5608.11.4 Smoking and open flames. Smoking, matches, flame-producing devices, open flames, firearms and firearms cartridges shall not be permitted inside of or within 50 feet (15 240 mm) of magazines. Where low explosives are stored in magazines, spark-producing tools shall not be used. Such magazines shall be bonded and grounded.

5608.11.5 Housekeeping. Housekeeping shall be in accordance with Section 5604.8.1.

5608.11.6 Pyrotechnic operators. A pyrotechnic operator shall obtain required permits and be responsible for notifying the fire code official prior to using the pyrotechnic special effects material. The pyrotechnic operator shall have the authority and responsibility for the storage, use and handling of the pyrotechnic special effects material. The authority of the pyrotechnic operator shall not be assumed by anyone and shall be superseded only by the fire code official.

5608.11.7 Use of pyrotechnic special effects material. Use of pyrotechnic special effects material shall be in accordance with Sections 5608.11.7.1 through 5608.11.7.3.

5608.11.7.1 General precautions.

5608.11.7.1.1 Demonstration and approval. When required by the fire code official, a test shall be conducted to demonstrate the safe use of pyrotechnic special effects material prior to normal use. The use of pyrotechnic special effects material shall be approved by the fire code official and the pyrotechnic operator in charge.

5608.11.7.1.2 Preparation. The company or producer shall allocate sufficient time to the pyrotechnic operator to prepare for the transportation, packing, storing and daily securing, and to dispose of or otherwise handle pyrotechnic special effects material in a safe manner.

5608.11.7.1.3 Separation distances for audiences. Each pyrotechnic device fired during a performance shall be separated from the audience by at least 15 feet (5 m) but not by less than twice the fallout radius of the device.

Exception: Where otherwise approved by the authority having jurisdiction. Concussion mortars shall be separated from the audience by a minimum of 25 feet (8 m). There shall be no glowing or flaming particles within 10 feet (3 m) of the audience.

5608.11.7.1.4 Crowd control. Onlookers shall be kept at a safe distance from the area where the pyrotechnic special effects material is discharged and so restrained until the area is cleared.

5608.11.7.1.5 Smoke control. When pyrotechnic special effects material is fired within a building, the quantity of smoke developed shall not obscure the visibility of exit signs or paths of egress travel. The maximum density of smoke shall be approved, and the pyrotechnic operator shall ensure that the maximum density is not exceeded. When required by the fire code official, provisions shall be made to confine smoke generated by pyrotechnic special effects material to an approved area and to remove such smoke from the building.

5608.11.7.2 Binary explosives. When binary explosives are used, the compounding and firing shall be performed by a pyrotechnic operator. Firing shall be subject to the conditions described in the permit.

5608.11.7.3 Surplus materials. Surplus materials shall be properly stored until they can be disposed of in a safe manner.

5608.12 Standby personnel and equipment. When necessary for the preservation of life or property, the *fire code official* is authorized to require the attendance of standby personnel and fire equipment. Where the use of certain indoor pyrotechnics requires smoke detectors to be bypassed or air-handling systems to be disengaged, the fire department shall be notified and a representative shall be present. The individual responsible for the life safety systems of the building shall return those systems to normal operating conditions as soon as the likelihood of false alarms from the pyrotechnics has passed.

216. Subsection 5701.4, “Permits,” of Section 5701, “General,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5701.4 Permits. Permits shall be required as set forth in Sections 105.5, ~~[and]~~ 105.6, and this chapter.”

217. Section 5701, “General,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended by adding a new Subsection 5701.6, “Construction Documents,” to read as follows:

“5701.6 Construction documents. Plans detailing indoor or outdoor storage (above or below grade), dispensing, use and handling of flammable and combustible liquids shall be submitted for review and approval to the fire code official. Plans shall include, but not be limited to, the following:

1. Amounts of flammable or combustible liquid involved.
2. Safety data sheets of all flammable or combustible liquid involved.
3. Room construction, dimensions, ventilation, sprinkler design, etc.
4. Secondary containment.
5. Piping specifications (vents, ports, etc.).
6. Location on property.
7. Property lines.
8. Buildings and structures.
9. Fire apparatus access roads.
10. Fire hydrants.
11. Manufacturer’s specifications on all equipment involved (tanks, dispensers, pumps, etc.).

5701.6.1 Plan review fees. Plan review fees for flammable and combustible liquids storage tanks shall be in accordance with the *Dallas Building Code*.”

218. Subsection 5703.2, “Fire Protection,” of Section 5703, “General Requirements,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended by adding a new Paragraph 5703.2.2, “Access,” to read as follows:

“5703.2.2 Access. Fire apparatus access roads for storage, use, dispensing, mixing and handling of flammable and combustible liquids shall be in accordance with Chapter 5.”

219. Subsection 5703.4, “Spill Control and Secondary Containment,” of Section 5703, “General Requirements,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5703.4 Spill control and secondary containment. Where the *maximum allowable quantity per control area* is exceeded, and where required by Section 5004.2, rooms, buildings or areas used for storage, dispensing, use, mixing or handling of flammable and combustible [~~Class I, H and IIIA~~] liquids shall be provided with spill control and secondary containment in accordance with Section 5004.2.”

220. Subsection 5703.6, “Piping Systems,” of Section 5703, “General Requirements,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

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

5703.6.1 Nonapplicability. The provisions of Section 5703.6 shall not apply to gas or oil well installations; piping that is integral to stationary or portable engines, including aircraft, watercraft and motor vehicles; and piping in connection with boilers and pressure vessels regulated by the Dallas[~~International~~] *Mechanical Code*.

5703.6.2 Design and fabrication of piping systems and components. Piping system components shall be designed and fabricated in accordance with the applicable standard listed in Table 5703.6.2 and Chapter 27 of NFPA 30, except as modified by Section 5703.6.2.1.

5703.6.2.1 Special materials. Low-melting-point materials (such as aluminum, copper or brass), materials that soften on fire exposure (such as nonmetallic materials) and nonductile material (such as cast iron) shall be acceptable for use underground in accordance with the applicable standard listed in Table 5703.6.2. Where such materials are used outdoors in above-ground piping systems or within buildings, they shall be in accordance with the applicable standard listed in Table 5703.6.2 and one of the following:

1. Suitably protected against fire exposure.

2. Located where leakage from failure would not unduly expose people or structures.
3. Located where leakage can be readily controlled by operation of remotely located valves in a location provided with *ready access*.

In all cases, nonmetallic piping shall be used in accordance with Section 27.4.6 of NFPA 30.

5703.6.3 Testing. Unless tested in accordance with the applicable section of ASME B31.9, piping, before being covered, enclosed or placed in use, shall be hydrostatically tested to 150 percent of the maximum anticipated pressure of the system, or pneumatically tested to 110 percent of the maximum anticipated pressure of the system, but not less than 5 pounds per square inch gauge (psig) (34.47 kPa) at the highest point of the system. This test shall be maintained for a sufficient time period to complete visual inspection of joints and connections. For not less than 10 minutes, there shall be no leakage or permanent distortion. Care shall be exercised to ensure that these pressures are not applied to vented storage tanks. Such storage tanks shall be tested independently from the piping.

5703.6.3.1 Existing piping. Existing piping shall be tested in accordance with this section where the *fire code official* has reasonable cause to believe that a leak exists. Piping that could contain flammable or *combustible liquids* shall not be tested pneumatically. Such tests shall be at the expense of the *owner* or operator.

Exception: Vapor-recovery piping is allowed to be tested using an inert gas.

5703.6.4 Protection from vehicles. Guard posts or other *approved* means shall be provided to protect piping, valves or fittings subject to vehicular damage in accordance with Section 312.

5703.6.5 Protection from external corrosion and galvanic action. Where subject to external corrosion, piping, related fluid-handling components and supports for both underground and above-ground applications shall be fabricated from noncorrosive materials, and coated or provided with corrosion protection. Dissimilar metallic parts that promote galvanic action shall not be joined.

5703.6.6 Valves. Piping systems shall contain a sufficient number of manual control valves and check valves to operate the system properly and to protect the plant under both normal and emergency conditions. Piping systems in connection with pumps shall contain a sufficient number of such valves to control properly the flow of liquids in normal operation and in the event of physical damage or fire exposure.

5703.6.6.1 Backflow protections. Connections to pipelines or piping by which equipment (such as tank cars, tank vehicles or marine vessels) discharges liquids into storage tanks shall be provided with check valves or block valves for automatic

protection against backflow where the piping arrangement is such that backflow from the system is possible. Where loading and unloading is done through a common pipe system, a check valve is not required. However, a block valve, located in an area where it is provided with *ready access* or remotely operable, shall be provided.

5703.6.6.2 Manual drainage. Manual drainage-control valves shall be located at *approved* locations remote from the tanks, diked area, drainage system and impounding basin to ensure their operation in a fire condition.

5703.6.7 Connections. Above-ground tanks with connections located below normal liquid level shall be provided with internal or external isolation valves located as close as practical to the shell of the tank. Except for liquids whose chemical characteristics are incompatible with steel, such valves, where external, and their connections to the tank shall be of steel.

5703.6.8 Piping supports. Piping systems shall be substantially supported and protected against physical damage and excessive stresses arising from settlement, vibration, expansion, contraction or exposure to fire. The supports shall be protected against exposure to fire by one of the following:

1. Draining liquid away from the piping system at a minimum slope of not less than 1 percent.
2. Providing protection with a *fire-resistance rating* of not less than 2 hours.
3. Other *approved* methods.

5703.6.9 Flexible joints. Flexible joints shall be *listed* and *approved* and shall be installed on underground liquid, vapor and vent piping at all of the following locations:

1. Where piping connects to underground tanks.
2. Where piping ends at pump islands and vent risers.
3. At points where differential movement in the piping can occur.

5703.6.9.1 Fiberglass-reinforced plastic piping. Fiberglass-reinforced plastic (FRP) piping is not required to be provided with flexible joints in locations where both of the following conditions are present:

1. Piping does not exceed 4 inches (102 mm) in diameter.
2. Piping has a straight run of not less than 4 feet (1219 mm) on one side of the connection where such connections result in a change of direction.

In lieu of the minimum 4-foot (1219 mm) straight run length, *approved* and *listed* flexible joints are allowed to be used under dispensers

and suction pumps, at submerged pumps and tanks, and where vents extend above ground.

5703.6.10 Pipe joints. Joints shall be liquid tight and shall be welded, flanged or threaded except that *listed* flexible connectors are allowed in accordance with Section 5703.6.9. Threaded or flanged joints shall fit tightly by using *approved* methods and materials for the type of joint. Joints in piping systems used for Class I liquids shall be welded where located in concealed spaces within buildings.

Nonmetallic joints shall be *approved* and shall be installed in accordance with the manufacturer's instructions.

Pipe joints that are dependent on the friction characteristics or resiliency of combustible materials for liquid tightness of piping shall not be used in buildings. Piping shall be secured to prevent disengagement at the fitting.

5703.6.11 Bends. Pipe and tubing shall be bent in accordance with ASME B31.9.

221. Subparagraph 5704.2.7.4, "Emergency Venting," of Paragraph 5704.2.7, "Design, Fabrication and Construction Requirements for Tanks," of Subsection 5704.2, "Tank Storage," of Section 5704, "Storage," of Chapter 57, "Flammable and Combustible Liquids," of Part V, "Hazardous Materials," of the 2021 International Fire Code is amended to read as follows:

"5704.2.7.4 Emergency venting. Stationary, aboveground storage tanks shall be equipped with additional venting that will relieve excessive internal pressure caused by exposure to fires. Emergency vents for Class I, II and IIIA liquids shall not discharge inside buildings. The venting shall be installed and maintained in accordance with Section 22.7 of NFPA 30.

Exception[s]:

[1.] Tanks larger than 12,000 gallons (45 420 L) in capacity storing Class IIIB liquids that are not within the diked area or the drainage path of Class I or II liquids do not require emergency relief venting.

~~[2. Emergency vents on protected aboveground tanks complying with UL 2085 containing Class II or IIIA liquids are allowed to discharge inside the building.]~~

222. Item 5704.2.7.5.8, “Overfill Prevention,” of Subparagraph 5704.2.7.5, “Tank Openings Other Than Vents,” of Paragraph 5704.2.7, “Design, Fabrication and Construction Requirements for Tanks,” of Subsection 5704.2, “Tank Storage,” of Section 5704, “Storage,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5704.2.7.5.8 Overfill prevention. An *approved* means or method in accordance with Section 5704.2.9.7.5 shall be provided to prevent the overfill of all Class I, II or IIIA liquid storage tanks. Storage tanks in refineries, bulk plants or terminals regulated by Section 5706.4 or 5706.7 shall have overfill protection accordance with API 2350.

An *approved* means or method in accordance with Section 5704.2.9.7.5 shall be provided to prevent the overfilling of Class IIIB liquid storage tanks connected to fuel-burning equipment inside buildings.

~~[Exception: Outside above-ground tanks with a capacity of 1,320 gallons (5000 L) or less.]”~~

223. Subparagraph 5704.2.9.5, “Above-Ground Tanks Inside of Buildings,” of Paragraph 5704.2.9, “Above-Ground Tanks,” of Subsection 5704.2, “Tank Storage,” of Section 5704, “Storage,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5704.2.9.5 Above-ground tanks inside of buildings. Above-ground tanks inside of buildings shall comply with Sections 5704.2.9.5.1 through 5704.2.9.5.3 ~~[and 5704.2.9.5.2]~~.

5704.2.9.5.1 Overfill prevention. Above-ground tanks storing Class I, II and IIIA liquids inside buildings shall be equipped with a device or other means to prevent overflow into the building including, but not limited to: a float valve; a preset meter on the fill line; a valve actuated by the weight of the tank’s contents; a low-head pump that is incapable of producing overflow; or a liquid-tight overflow pipe not less than one pipe size larger than the fill pipe and discharging by gravity back to the outside source of liquid or to an *approved* location. Tanks containing Class IIIB liquids and connected to fuel-burning equipment shall be provided with a means to prevent overflow into buildings in accordance with Section 5704.2.7.5.8.

5704.2.9.5.2 Fill pipe connections. Fill pipe connections for tanks storing Class I, II and IIIA liquids and Class IIIB liquids connected to fuel-burning equipment shall be in accordance with Section 5704.2.9.7.6.

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.”

224. Paragraph 5704.2.11, “Underground Tanks,” of Subsection 5704.2, “Tank Storage,” of Section 5704, “Storage,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5704.2.11 Underground tanks. Underground storage of *flammable* and *combustible liquids* in tanks shall comply with Section 5704.2 and Sections 5704.2.11.1 through 5704.2.11.4.4[5704.2.11.4.2.4].

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

1. Tanks shall be located with respect to existing foundations and supports such that the loads carried by the latter cannot be transmitted to the tank.

2. The distance from any part of a tank storing liquids to the nearest wall of a *basement*, pit, cellar or *lot line* shall be not less than 3 feet (914 mm).
3. A minimum distance of 1 foot (305 mm), shell to shell, shall be maintained between underground tanks.

5704.2.11.2 Depth and cover. Excavation for underground storage tanks shall be made with due care to avoid undermining of foundations of existing structures. Underground tanks shall be set on firm foundations and surrounded with not less than 6 inches (152 mm) of noncorrosive inert material, such as clean sand or gravel well tamped in place or in accordance with the manufacturer's installation instructions. Tanks shall be covered with a minimum of 2 feet (610 mm) of earth or shall be covered by not less than 1 foot (305 mm) of earth, on top of which shall be placed a slab of reinforced concrete not less than 4 inches (102 mm) thick.

When underground tanks are, or are likely to be, subjected to traffic, they shall be protected against damage from vehicles passing over them by at least 3 feet (914 mm) of earth cover, or 18 inches (457 mm) of well-tamped earth plus 6 inches (152 mm) of reinforced concrete, or 8 inches (203 mm) of asphaltic concrete. When asphaltic or reinforced concrete paving is used as part of the protection, it shall extend at least 1 foot (305 mm) horizontally beyond the outline of the tank in all directions.

For tanks built in accordance with Section 5704.2.7, the burial depth and the height of the vent line shall be such that the static head imposed at the bottom of the tank will not exceed 10 psig (69 kPa) if the fill or vent pipe is filled with liquid.

If the depth of cover exceeds 7 feet (2157 mm) or the manufacturer's specifications, reinforcements shall be provided in accordance with the tank manufacturer's recommendations.

Nonmetallic underground tanks shall be installed in accordance with the manufacturer's instructions. The minimum depth of cover shall be as specified above.

5704.2.11.3 Overfill protection and prevention systems. Fill pipes shall be equipped with a spill container and an overfill prevention system in accordance with NFPA 30.

5704.2.11.4 Leak prevention. Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 through [and] 5704.2.11.4.4[2].

5704.2.11.4.1 Inventory control. Daily inventory records for underground storage tank systems shall be maintained.

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.

5704.2.11.4.2.1 Location. The leak detection panel status shall be annunciated at an *approved* on-site location.

5704.2.11.4.3 Observation wells. Approved sampling tubes of a minimum of 4 inches (102 mm) 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 (305 mm) 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 sump at the corners of the excavation with a minimum of four sumps. Sampling tubes shall be placed in the product line excavation within 10 feet (3048 mm) of the tank excavation and one every 50 feet (15 240 mm) routed along product lines towards the dispensers. A minimum of two sampling tubes are required.

5704.2.11.4.4 Secondary containment. An approved method of secondary containment shall be provided for underground tank and piping systems.”

225. Subparagraph 5704.2.12.1, “Acceptance Testing,” of Paragraph 5704.2.12, “Testing,” of Subsection 5704.2, “Tank Storage,” of Section 5704, “Storage,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5704.2.12.1 Acceptance testing. Prior to being fueled, or placed into service, tanks shall be tested for tightness in the presence of the fire code official in accordance with Section 21.5 of NFPA 30.”

226. Item 5704.2.13.1.4, “Tanks Abandoned in Place,” of Subparagraph 5704.2.13.1, “Underground Tanks,” of Paragraph 5704.2.13, “Abandonment and Status of Tanks,” of Subsection 5704.2, “Tank Storage,” of Section 5704, “Storage,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5704.2.13.1.4 Tanks abandoned in place. Tanks abandoned in place shall be as follows:

1. *Flammable* and *combustible liquids* shall be removed from the tank and connected piping.
2. The suction, inlet, gauge, vapor return and vapor lines shall be disconnected.
3. The tank shall be filled completely with an *approved* inert solid material.
4. Remaining underground piping shall be capped or plugged.
5. A record of tank size, location and date of abandonment shall be retained.
6. All exterior above-grade fill piping shall be permanently removed when tanks are abandoned or removed.
7. Abandonment of tanks shall be in the presence of the fire code official.

227. Subparagraph 5704.2.14.1, "Removal," of Paragraph 5704.2.14, "Removal and Disposal of Tanks," of Subsection 5704.2, "Tank Storage," of Section 5704, "Storage," of Chapter 57, "Flammable and Combustible Liquids," of Part V, "Hazardous Materials," of the 2021 International Fire Code is amended to read as follows:

"5704.2.14.1 Removal. Removal of above-ground and underground tanks shall be in accordance with all of the following:

1. *Flammable* and *combustible liquids* shall be removed from the tank and connected piping.
2. Piping at tank openings that is not to be used further shall be disconnected.
3. Piping shall be removed from the ground.

Exception: Piping is allowed to be abandoned in place where the *fire code official* determines that removal is not practical. Abandoned piping shall be capped and safeguarded as required by the *fire code official*.

4. Tank openings shall be capped or plugged, leaving a 1/8-inch to 1/4-inch diameter (3.2 mm to 6.4 mm) opening for pressure equalization.
5. Tanks shall be purged of vapor and inerted prior to removal.
6. All exterior above-grade fill and vent piping shall be permanently removed.

Exception: Piping associated with bulk plants, terminal facilities and refineries.

7. Removal of tanks shall be in the presence of the *fire code official*.

228. Paragraph 5706.5.4, “Dispensing From Tank Vehicles and Tank Cars,” of Subsection 5706.5, “Bulk Transfer and Process Transfer Operations,” of Section 5706, “Special Operations,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“5706.5.4 Dispensing from tank vehicles and tank cars. Dispensing from tank vehicles and tank cars into the fuel tanks of motor vehicles shall be prohibited unless allowed by and conducted in accordance with Sections 5706.5.4.1 through 5706.5.4.5. A permit shall be issued for each site where mobile dispensing of Class II or Class III liquids into the fuel tanks of motor vehicles occurs in accordance with this chapter. A mobile fueling permit shall be issued for each fuel dispensing vehicle that dispenses Class II or Class III liquids in accordance with this chapter.

5706.5.4.1 Marine craft and special equipment. Liquids intended for use as motor fuels are allowed to be transferred from tank vehicles into the fuel tanks of marine craft and special equipment where *approved* by the *fire code official*, and where:

1. The tank vehicle’s specific function is that of supplying fuel to fuel tanks.
2. The operation is not performed where the public has access or where there is unusual exposure to life and property.
3. The dispensing line does not exceed 50 feet (15 240 mm) in length.
4. The dispensing nozzle is *approved*.

5706.5.4.2 Emergency refueling. Where *approved* by the *fire code official*, dispensing of motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles is allowed during emergencies. Dispensing from tank vehicles shall be in accordance with Sections 5706.2.8 and 5706.6.

5706.5.4.3 Aircraft fueling. Transfer of liquids from tank vehicles to the fuel tanks of aircraft shall be in accordance with Chapter 20. Mobile fuel dispensing vehicles are prohibited from dispensing flammable or combustible liquids into the fuel tanks of aircraft on non-airport property.

Exception: Requests for temporary dispensing of flammable or combustible liquids into the fuel tanks of aircraft on non-airport property will be reviewed on an individual basis. If approved by the *fire code official*, standby personnel shall be

required. Charges for standby personnel shall be as normally calculated by the fire department.

5706.5.4.4 Fueling of vehicles at farms, construction sites and similar areas.

Transfer of liquid from tank vehicles to motor vehicles for private use on farms and rural areas and at construction sites, earth-moving projects, gravel pits and borrow pits is allowed in accordance with Section 5706.2.8.

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

1. Dispensing shall occur only at sites that have been issued a permit to conduct mobile fueling.
2. The *owner* of a mobile fueling operation shall provide to the jurisdiction a written response plan that demonstrates readiness to respond to a fuel spill and carry out appropriate mitigation measures, and describes the process to dispose properly of contaminated materials.
3. A detailed site plan shall be submitted with each application for a permit. The site plan shall indicate: all buildings, structures and appurtenances on site and their use or function; all uses adjacent to the *lot lines* of the site; the locations of all storm drain openings, adjacent waterways or wetlands; information regarding slope, natural drainage, curbing, impounding and how a spill will be retained on the site property; and the scale of the site plan.

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

4. The *fire code official* is allowed to impose limits on the times and days during which mobile fueling operations is allowed to take place, and specific locations on a site where fueling is permitted.
5. Mobile fueling operations shall be conducted in areas not open to the public or shall be limited to times when the public is not present.
6. Mobile fueling shall not take place within 15 feet (4572 mm) of buildings, property lines, combustible storage or storm drains.

Exceptions:

1. The distance to storm drains shall not apply where an *approved* storm drain cover or an *approved* equivalent that will prevent any fuel from reaching the drain is in place prior to fueling or a fueling hose being placed within 15 feet (4572 mm) of the drain. Where placement of a storm drain cover will cause the accumulation of excessive water or difficulty in conducting the fueling, such cover shall not be used and the fueling shall not take place within 15 feet (4572 mm) of a drain.
2. The distance to storm drains shall not apply for drains that direct influent to *approved* oil interceptors.
7. The tank vehicle shall comply with the requirements of NFPA 385 and local, state and federal requirements. The tank vehicle's specific functions shall include that of supplying fuel to motor vehicle fuel tanks. The vehicle and all its equipment shall be maintained in good repair.
8. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the tank vehicle or the point of fueling shall be prominently posted on three sides of the vehicle including the back and both sides.
9. A portable fire extinguisher with a minimum rating of 40:BC shall be provided on the vehicle with signage clearly indicating its location.
10. The dispensing nozzles and hoses shall be of an *approved* and *listed* type.
11. The dispensing hose shall not be extended from the reel more than 100 feet (30 480 mm) in length.
12. Absorbent materials, nonwater-absorbent pads, a 10-foot-long (3048 mm) containment boom, an *approved* container with lid and a nonmetallic shovel shall be provided to mitigate a minimum 5-gallon (19 L) fuel spill.
13. Tank vehicles shall be equipped with a "fuel limit" switch such as a count-back switch, to limit the amount of a single fueling operation to not more than 500 gallons (1893 L) before resetting the limit switch.

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

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

15. Operators of tank vehicles used for mobile fueling operations shall have in their possession at all times an emergency communications device to notify the proper authorities in the event of an emergency.
16. The tank vehicle dispensing equipment shall be constantly attended and operated only by designated personnel who are trained to handle and dispense motor fuels.
17. Fuel dispensing shall be prohibited within 25 feet (7620 mm) of any source of ignition.
18. The engines of vehicles being fueled shall be shut off during dispensing operations.
19. Nighttime fueling operations shall only take place in adequately lighted areas.
20. The tank vehicle shall be positioned with respect to vehicles being fueled to prevent traffic from driving over the delivery hose.
21. During fueling operations, tank vehicle brakes shall be set, chock blocks shall be in place and warning lights shall be in operation.
22. Motor vehicle fuel tanks shall not be topped off.
23. The dispensing hose shall be properly placed on an *approved* reel or in an *approved* compartment prior to moving the tank vehicle.
24. The *fire code official* and other appropriate authorities shall be notified when a reportable spill or unauthorized discharge occurs.
25. Operators shall place a drip pan or an absorbent pillow under each fuel fill opening prior to and during dispensing operations. Drip pans shall be liquid-tight. The pan or absorbent pillow shall have a capacity of not less than 3 gallons (11.36 L). Spills retained in the drip pan or absorbent pillow need not be reported. Operators, when fueling, shall have on their person an absorbent pad capable of capturing diesel fuel overfills. Except during fueling, the nozzle shall face upward and an absorbent pad shall be kept under the nozzle to catch drips. Contaminated absorbent pads or pillows shall be disposed of regularly in accordance with local, state and federal requirements.”

229. Section 5707, “On-Demand Mobile Fueling Operations,” of Chapter 57, “Flammable and Combustible Liquids,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

**“SECTION 5707
ON-DEMAND MOBILE FUELING OPERATIONS**

5707.1 General. On-demand mobile fueling operations that dispense Class I, II and III liquids into the fuel tanks of motor vehicles shall comply with Sections 5706.5.4.5 and 5707.1 through 5707.6.6.

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

5707.1.1 Approval required. Mobile fueling operations shall not be conducted without first obtaining a *permit* and approval from the *fire code official*. Mobile fueling operations shall occur only at *approved* locations. The *fire code official* is authorized to approve individual locations or geographic areas where mobile fueling is allowed.

5707.1.2 Permits. Permits shall be required as set forth in Section 105. A mobile fueling permit shall be issued for each fuel dispensing vehicle that dispenses flammable and combustible liquids in accordance with this chapter. The fire department shall inspect each vehicle annually to ensure that the equipment is in good working order and in compliance with the provisions of this chapter before issuing a permit to operate.

5707.1.3 Site plan review fee. Site plans, in a format acceptable to the fire code official, shall be submitted prior to conducting mobile fueling operations and comply with Section 5707.3.3. Plans for mobile fueling operations shall be submitted with a nonrefundable \$216.00 site plan review fee.

5707.2 Mobile fueling vehicle. An on-demand mobile fueling vehicle shall be that which is utilized in on-demand fueling operations for the dispensing of Class I, II or III liquids into the fuel tanks of motor vehicles.

5707.2.1 Mobile fueling vehicle classifications. An on- demand mobile fueling vehicle shall be characterized as one of the following:

1. Tier 1 mobile fueling vehicle. A tank vehicle that complies with NFPA 385 and that has chassis- mounted tanks where the aggregate capacity does not exceed 1,600 gallons (6057 L).
2. Tier 2 mobile fueling vehicle. A vehicle with one or more chassis-mounted tanks or containers that do not exceed 110 gallons (416 L) in capacity with an aggregate capacity that does not exceed 800 gallons (3028 L) or the weight capacity of the vehicle in accordance with DOTn.
- ~~3. Tier 3 mobile fueling vehicle. A vehicle that carries a maximum aggregate capacity of 60 gallons (227 L) of motor fuel in metal safety cans listed in accordance with UL 30 or other approved metal containers, each not to exceed 5 gallons (19L) in capacity.]~~

5707.2.2 Mobile fueling vehicle requirements. The mobile fueling vehicle and its equipment shall be maintained in good repair. Each mobile fueling vehicle shall comply with all local, state and federal requirements, as well as the following:

1. Mobile fueling vehicles with a chassis-mounted tank in excess of 110 gallons (416 L) shall also comply with the requirements of Section 5706.6 and NFPA 385.
2. The mobile fueling vehicle and its equipment shall be maintained in good repair
3. Safety cans and *approved* metal containers shall be secured to the mobile fueling vehicle except when in use.
4. Fueling a motor vehicle from tanks or containers mounted in a trailer connected to a mobile fueling vehicle shall be prohibited.

5707.3 Required documents. Documents developed to comply with Sections 5707.3.1 through 5707.3.3 shall be updated as necessary by the *owner* of the mobile fueling operation and shall be maintained in compliance with Section 109.3.

5707.3.1 Safety and emergency response plan. Mobile fueling operators shall have an *approved* written safety and emergency response plan that establishes policies and procedures for fire safety, spill prevention and control, personnel training and compliance with other applicable requirements of this code.

5707.3.2 Training records. Mobile fueling vehicles shall be operated only by designated personnel who are trained on proper fueling procedures and the safety and emergency response plan. Training records of operators shall be maintained.

5707.3.3 Site plan. Where required by the *fire code official*, a site plan shall be developed for each location or area at which mobile fueling occurs. The site plan shall be in sufficient detail to indicate the following:

1. All buildings and structures.
2. *Lot lines* or property lines.
3. Electric car chargers.
4. Solar photovoltaic parking lot canopies.
5. Appurtenances on-site and their use or function.
6. All uses adjacent to the *lot lines* of the site.
7. Fueling locations.
8. Locations of all storm drain openings and adjacent waterways or wetlands.

9. Information regarding slope, natural drainage, curbing and impounding.
10. How a spill will be kept on the site property.
11. Scale of the site plan.

5707.4 Mobile fueling areas. The fire code official is authorized to impose limits on the times and days during which mobile fueling operations are allowed to take place, and specific locations on a site where fueling is permitted. During fueling, the mobile fueling vehicle and point of connection to the vehicle shall not be located on public streets, *public ways* or inside *buildings*. Fueling on the roof level of parking structures or other *buildings* is prohibited. 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.

5707.4.1 Separation. During fueling, the point of connection to the vehicle being fueled shall not take place within 25 feet (7620 mm) of buildings, *lot lines*, property lines or combustible storage. Mobile fueling vehicles shall not park within 10 feet (3048 mm) of buildings, *lot lines*, property lines or combustible storage.

Exception[s]:

- ~~1. The fire code official shall be authorized to decrease the separation distance for dispensing from metal safety cans or other approved metal containers in accordance with Section 5707.2.~~
- 2]. The point of fueling shall not take place within 10 feet (3048 mm) of buildings, *lot lines*, property lines or combustible storage where the mobile fueling vehicle has an *approved* vapor recovery system or is servicing vehicles with onboard refueling vapor recovery.

Where dispensing operations occur within 15 feet (4572 mm) of a storm drain, an *approved* storm drain cover or an *approved* equivalent method that will prevent any fuel from reaching the drain shall be used.

5707.4.2 Sources of ignition. Smoking, open flames and other sources of ignition shall be prohibited within 25 feet (7620 mm) of fuel dispensing activities. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the vehicle or the point of fueling shall be prominently posted on the mobile fueling vehicle. The engines of vehicles being fueled shall be shut off during fueling.

5707.4.3 Electrical equipment. Mobile fueling shall not occur within 20 feet (6096 mm) of electrical equipment located within 18 inches (457 mm) of the ground unless such electrical equipment is rated for Class I, Division 2, hazardous locations in accordance with NFPA 70.

5707.5 Equipment. Mobile fueling equipment shall comply with Sections 5707.5.1 through 5707.5.5.

5707.5.1 Dispensing hoses and nozzles. Where equipped, the dispensing hose shall not exceed 50 feet (15 240 mm) in length. The dispensing nozzles and hoses shall be of an *approved* and *listed* type. Where metal-to-metal contact cannot be made between the nozzle and the fuel fill opening, a means for bonding the mobile fueling vehicle to the motor vehicle shall be provided and employed during fueling operations.

5707.5.2 Breakaway device. A *listed* breakaway device shall be provided at the nozzle.

Exception: Mobile fueling vehicles equipped with an approved brake interlock tied to the nozzle holder that prohibits movement of the mobile fueling vehicle when the nozzle is removed from its holder or tied to the delivery of fuel that prevents activation of the pumping system.

5707.5.3 Shutoff valve and fuel limit. Mobile fueling vehicles shall be equipped with a *listed* shutoff valve assembly and a fuel limit switch set to a maximum of 30 gallons (116 L).

5707.5.4 Fire extinguisher. An *approved* portable fire extinguisher complying with Section 906 with a minimum rating of 4-A:80-B:C shall be provided on the mobile fueling vehicle with signage clearly indicating its location.

5707.5.5 Spill kit. Mobile fueling vehicles shall contain a minimum 5-gallon (19 L) spill kit of an *approved* type.

5707.6 Operations. Mobile fueling vehicles shall be constantly attended during fueling operations with brakes set and warning lights in operation. Mobile fueling vehicles shall not obstruct emergency vehicle access roads. Provisions shall be made to prevent liquids spilled during dispensing operations from flowing into buildings or off-site. Acceptable methods include, but shall not be limited to, grading driveways, raising doorsills or other approved means.

5707.6.1 Dispensing hose. Where equipped, mobile fueling vehicles shall be positioned in a manner to preclude traffic from driving over the dispensing hose. The dispensing hose shall be properly placed on an *approved* reel or in an *approved* compartment prior to moving the mobile fueling vehicle.

5707.6.2 Drip control. Operators shall place a drip pan or an absorbent pillow under the nozzle and each fuel fill opening prior to and during dispensing operations to catch drips.

5707.6.3 Safety cones. Safety cones or other visual barriers shall be employed as warning devices to highlight the vehicle fueling area.

5707.6.4 Vehicle lights. The mobile fueling vehicle flasher lights shall be in operation while dispensing operations are in progress.

5707.6.5 Nighttime deliveries. Nighttime deliveries shall be made only in areas deemed adequately lighted by the *fire code official*.

5707.6.6 Spill reporting. Any spill in excess of 5-gallons (19 L) [Spills] shall be immediately reported to the *fire code official* in the manner prescribed. [~~in accordance with Section 5003.3.1.~~]

230. Section 6101, “General,” of Chapter 61, “Liquefied Petroleum Gases,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“SECTION 6101 GENERAL

6101.1 Scope. Storage, handling and transportation of liquefied petroleum gas (LP-gas) and the installation of LP-gas equipment pertinent to systems for such uses shall comply with this chapter, ~~and~~ NFPA 58 and NFPA 160. Properties of LP-gases shall be determined in accordance with Appendix B of NFPA 58 and NFPA 160. Storage and use of LP-gas inside Fair Park shall be in accordance with Section 32-19 of the *Dallas City Code*.

6101.2 Permits. Permits shall be required as set forth in Sections 105.5 and 105.6.

Distributors shall not fill an LP-gas container for which a permit is required unless a permit for installation has been issued for that location by the *fire code official*.

6101.2.1 Permit duration. A permit expires on the earliest of the following dates:

1. On the expiration date shown on the permit.
2. When the permittee completes the permitted activity.
3. If the permittee is an employee conducting the permitted activity within the course and scope of employment, when the employer’s permit expires or is revoked, whichever occurs first.

6101.2.2 Demonstration or portable cooking permits. A permit to use LP-gas for demonstration or portable cooking purposes that are temporary in nature, including but not limited to convention and promotional uses, may be issued for a period not to exceed 10 days, and, upon expiration, may be renewed by the *fire code official* upon application and the payment of all required permit fees. The *fire code official* may issue an annual permit for portable cooking purposes that are long term and continuous in nature and performed at a fixed location, including, but not limited to, street vending uses. The annual permit expires one year from the date of issuance and may be renewed by the *fire code official* upon

application and the payment of all required permit fees. See Section 105.6 for additional permits required.

6101.3 Construction documents. Where a single LP-gas container is 250 [~~more than 2,000~~] gallons (~~1136~~[7570]L) in water capacity or the aggregate water capacity of LP-gas containers is 2,000 [~~more than 4,000~~] gallons (~~7570~~[45–140]L) or more, the installer shall submit *construction documents* for such installation.

Plans detailing indoor or outdoor storage (above or below grade), dispensing, use and handling of LP-gas shall be submitted for review and approval to the building official. Plans shall include, but not be limited to, the following:

1. Amounts of LP-gas involved.
2. Safety data sheets of all LP-gas involved.
3. Room construction, dimensions, ventilation, sprinkler design, etc.
4. Secondary containment.
5. Piping specifications (vents, ports, etc.).
6. Location on property.
7. Property lines.
8. Buildings and structures.
9. Fire apparatus access roads.
10. Fire hydrants.
11. Manufacturer's specifications on all equipment involved (tanks, dispensers, pumps, etc.).

6101.4 LP-gas equipment. All LP-gas devices shall be listed for their intended use.”

231. Subparagraph 6103.2.1.5, “Demonstration Uses,” of Paragraph 6103.2.1, “Portable Containers,” of Subsection 6103.2, “Use of LP-Gas Containers in Buildings,” of Section 6103, “Installation of Equipment,” of Chapter 61, “Liquefied Petroleum Gases,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“6103.2.1.5 Demonstration uses. Portable LP-gas containers are allowed to be used temporarily for demonstrations and public exhibitions. Such containers shall not exceed a water capacity of 12 pounds (5 kg). Where more than one such container is present in the same room, each container shall be separated from other containers by a distance of not less than 20 feet (6096 mm). Portable LP-gas containers inside exhibition halls shall also comply with Section 3105.”

232. Paragraph 6103.2.1, “Portable Containers,” of Subsection 6103.2, “Use of LP-Gas Containers in Buildings,” of Section 6103, “Installation of Equipment,” of Chapter 61, “Liquefied Petroleum Gases,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended by adding a new Subparagraph 6103.2.1.8, “Jewelry Repair, Dental Labs and Similar Occupancies,” 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 (6096 mm). A hot work permit is required.”

233. Subsection 6104.2, “Maximum Capacity Within Established Limits,” of Section 6104, “Location of LP-Gas Containers,” of Chapter 61, “Liquefied Petroleum Gases,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

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

Exceptions:

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

2. Except as permitted in Sections 308, 6104.3.3, and as to the extent allowed by state law, LP-gas containers are not permitted in residential areas.”

234. Subsection 6104.3, “Container Location,” of Section 6104, “Location of LP-Gas Containers,” of Chapter 61, “Liquefied Petroleum Gases,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended by adding a new Paragraph 6104.3.3, “Spas, Pool Heaters and Other Listed Devices,” to read as follows:

“6104.3.3 Spas, pool heaters and other listed devices. Where natural gas service is not available, LP-gas containers are allowed to be used to supply spa and pool heaters or other listed devices. Such containers shall not exceed 250-gallon (946 L) 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 500 gallon above ground or 1,000 gallon underground containers.”

235. Subsection 6107.4, “Protecting Containers From Vehicles,” of Section 6107, “Safety Precautions and Devices,” of Chapter 61, “Liquefied Petroleum Gases,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended 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 ~~[NFPA 58]~~.”

236. Subsection 6109.13, “Protection of Containers,” of Section 6109, “Storage of Portable LP-Gas Containers Awaiting Use or Resale,” of Chapter 61, “Liquefied Petroleum Gases,” of Part V, “Hazardous Materials,” of the 2021 International Fire Code is amended to read as follows:

“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.

~~[Exception: Vehicle impact protection shall not be required for protection of LP-gas containers where the containers are kept in lockable, ventilated cabinets of metal construction.]”~~

237. The CGR Standard of Chapter 80, “Referenced Standards,” of Part VI, “Referenced Standards,” of the 2021 International Fire Code is amended to read as follows:

“46 CFR Parts 30, 32, 35 & 39—~~2000~~ [1999] **Shipping**
5706.8”

238. Appendices A, K, and M of the 2021 International Fire Code are not adopted.

239. Appendices C, E, F, G, H, I, J, and L of the 2021 International Fire Code are adopted.

240. Appendix B, “Fire-Flow Requirements for Buildings,” of the 2021 International Fire Code is adopted with the following amendment:

A. Footnote a of Table B105.2, “Required Fire Flow for Buildings Other Than One-and Two-Family Dwellings, Group R-3 and R-4 Buildings and Townhouses,” of Subsection B105.2, “Buildings Other Than One- and Two-Family Dwellings, Group R-3 and R-4 Buildings and Townhouses” is amended to read as follows:

“a. The reduced fire-flow shall be not less than 1,500 [~~1,000~~] gallons per minute.”

241. Appendix D, “Fire Apparatus Access Roads,” of the 2021 International Fire Code is adopted with the following amendments:

A. Subsection D102.1, “Access and Loading,” of Section D102, “Required Access,” is amended to read as follows:

“**D102.1 Access and loading.** Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an *approved* fire apparatus access road with asphalt, concrete or other *approved* driving surface capable of supporting the imposed load of fire apparatus weighing at least 81,500 [~~75,000~~] pounds (36 968 [~~34 050~~] kg).”

B. Subsection D103.2, “Grade,” of Section D103, “Minimum Specifications,” is amended to read as follows:

“D103.2 Grade. See Section 503.2.7. ~~[Fire apparatus access roads shall not exceed 10 percent in grade.~~

~~**Exception:** Grades steeper than 10 percent as approved by the fire code official.]”~~

C. Subsection D103.5, “Fire Apparatus Access Road Gates,” of Section D103, “Minimum Specifications,” is amended to read as follows:

“D103.5 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with Section O104, “Limited Access Gates,” of Appendix O. ~~[all of the following criteria:~~

- ~~1. Where a single gate is provided, the gate width shall be not less than 20 feet (6096 mm). Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet (3658 mm).~~
- ~~2. Gates shall be of the horizontal swing, horizontal slide, vertical lift or vertical pivot type.~~
- ~~3. Construction of gates shall be of materials that allow manual operation by one person.~~
- ~~4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.~~
- ~~5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.~~
- ~~6. Methods of locking shall be submitted for approval by the fire code official.~~
- ~~7. Electric gate operators, where provided, shall be listed in accordance with UL 325.~~
- ~~8. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.]”~~

D. Subsection D103.6, “Signs,” of Section D103, “Minimum Specifications,” is amended to read as follows:

~~“D103.6 Signs.~~ See Section 503.3. [~~Where required by the fire code official, fire apparatus access roads shall be marked with permanent “NO PARKING FIRE LANE” signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.~~

~~— **D103.6.1 Roads 20 to 26 feet in width.** Fire lane signs as specified in Section D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6096 to 7925 mm).~~

~~**D103.6.2 Roads more than 26 feet in width.** Fire lane signs as specified in Section D103.6 shall be posted on one side of fire apparatus access roads more than 26 feet wide (7925 mm) and less than 32 feet wide (9754 mm).]~~

E. Figure D103.6, “Fire Lane Signs,” of Section D103, “Minimum Specifications,” of the 2021 International Fire Code is deleted.

242. Appendix L, “Requirements for Fire Fighter Air Replenishment Systems,” of the 2021 International Fire Code is adopted with the following amendments

A. Subsection L101.1, “Scope,” of Section L101, “General,” is amended to read as follows:

~~“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. [~~The adopting ordinance shall specify building characteristics or special hazards that establish thresholds triggering a requirement for the installation of a FARS. The requirement shall be based on the fire department's capability of replenishing fire fighter breathing air during sustained emergency operations. Considerations shall include:~~]

1. Any new buildings 5 or more stories in height. [~~Building characteristics, such as number of stories above or below grade plane, floor area, type of construction and fire resistance of the primary structural frame to allow sustained fire fighting operations based on a rating of not less than 2 hours.~~]
2. Any new building with 2 or more floors below grade. [~~Special hazards, other than buildings, that require unique accommodations to allow the fire department to replenish fire fighter breathing air.~~]

3. Any new building 500,000 square feet or more in floor area. [Fire department staffing level.]

L101.1.1 Supply Riser. 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 in floor area shall be located adjacent to each standpipe connection[Availability of a fire department breathing air replenishment vehicle].”

B. Paragraph L104.13.1, “Location,” of Subsection L104.13, “fill Stations,” of Section L104, “Design and Installation,” is amended as follows:

“L104.13.1 Reserved. [Location. Fill stations for refilling breathing air cylinders shall be located as follows:

1. Fill stations shall be provided at the fifth floor above and below the ground level floor and every third floor level thereafter.
2. On floor levels requiring fill stations, one fill station shall be provided adjacent to a required exit stair at a location designated by the fire code official. In buildings required to have three or more exit stairs, additional fill stations shall be provided at a ratio of one fill station for every three stairways.]

C. Paragraph L104.14.1, “Location,” of Subsection L104.14, “External Mobile Air Connection,” of Section L104, “Design and Installation,” is amended to read as follows:

“L104.14.1 Location. 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 feet of a fire apparatus access road along an unobstructed path; and shall be located in a secured cabinet with an approved sign. [The location of the external mobile air connection shall be accessible to mobile air apparatus and approved by the fire code official.]”

243. The 2021 International Fire Code is amended by adding a new Appendix O, “Miscellaneous Dallas Fire-Rescue Department Standards,” to read as follows:

**“APPENDIX O
MISCELLANEOUS DALLAS FIRE-RESCUE DEPARTMENT
STANDARDS**

SECTION O101 GENERAL

O101.1 General. The following standards of the Dallas Fire-Rescue Department are codified as a supplement to the Dallas Fire Code.

SECTION O102 SPECIFICATIONS FOR SECURING UNSECURED VACANT STRUCTURES

O102.1 General. The diagrams and/or specifications in this standard delineate the *approved* methods for properly securing windows, doors and oversized openings of an unsecured vacant structure. All first-floor openings shall be secured. Openings above the first floor shall be secured if they are subject to unauthorized entry or vandalism. All open vacant structures shall comply with these standards. Enforcement is accomplished pursuant to the *Dallas Fire Code*.

O102.2 First notification to secure a structure. Upon receipt of a first notification to secure an unsecured vacant structure, the operator shall secure the structure within 48 hours. Doors and windows which are not in disrepair can be locked and shall be considered secured. All other openings shall be adequately secured to prevent unauthorized entry.

O102.3 Second notification to secure a structure. Should a second notification to secure a structure be necessary within one year of the initial notification, all openings shall be secured as specified in Section O102.4.

O102.4 Specifications and materials. Specifications and materials are outlined in this section (see attached diagrams and specifications).

O102.4.1 Specifications and materials for securing windows. The following specifications and materials are to be used in securing windows:

1. ½-inch (12.7-mm) CDX plywood cut to provide an overlap of 2 inches (50.8 mm) on all sides secured on exterior side.
2. 8 penny cement coated, hot dipped zinc or galvanized nails.^a
3. 2 inch (50.8 mm) steel washer.
4. ¼-inch (6.4 mm) steel plate 6-inch square (0.003 87 m²) for use as a washer.
5. 2-inch X 4-inch (50 mm by 101.6 mm) pine board cut to provide an overlap of 2 inches (50.8 mm) on both sides.^b

6. ½-inch (12.7 mm) carriage bolt and ½-inch (12.7 mm) lock nut.
 - a. If applicable, 1½-inch (38.1 mm) masonry nails or # 8 1¼-inch (31.8 mm) sheet metal screws shall be used. All nails and screws on all installations may not exceed a maximum spacing of 12 inches (304.8 mm).
 - b. 2-inch X 4-inch (50.8 mm by 101.6 mm) pine board assembly should be centered if possible. Window shall have to be raised if not broken.

Casement, other window types which open outward, and picture windows with glass intact are exempt from the 2-inch X 4-inch (50 mm by 101.6 mm) pine board assembly requirement. However, they shall still be boarded from the exterior. Nails or screws may not exceed a maximum spacing of 6 inches (152.4 mm).

O102.4.2 Specifications and materials for securing doors. The following specifications and materials are to be used in securing doors:

1. ½-inch (12.7 mm) CDX plywood cut to provide an overlap of 2 inches (50.8 mm) on all sides.
2. 8 penny cement coated, hot dipped zinc or galvanized nails.^a
3. All doors are to be secured on the exterior side.
 - a. If applicable 1½-inch (38.1 mm) masonry nails or # 8 1¼-inch (31.75 mm) sheet metal screws shall be used. All nails and screws on installations may not exceed a maximum spacing of 6 inches (152.4 mm).

O102.4.3 Specifications and materials for securing oversized openings. The following specifications and materials are to be used for securing oversized openings:

1. ½-inch (12.7 mm) CDX plywood cut to provide an overlap of 2 inches (50.8 mm) on all sides.
2. 2-inch X 4-inch (50.8 mm by 101.6 mm) pine board center support.^a
3. 8 penny cement coated, hot dipped zinc or galvanized nails^b
 - a. 2-inch X 4-inch (50.8 mm by 101.6 mm) center support shall be substantially anchored to prevent the separation of the adjoining sections of plywood [plywood clip couplers may not be used in lieu of 2-inch X 4-inch (50.8 mm by 101.6 mm) pine board].

- b. If applicable, 1½-inch (38.1 mm) masonry nails or #8 ¼-inch (31.75 mm) sheet metal screws shall be used. All nails and screws on all installations may not exceed a maximum spacing of 6 inches (152.4 mm).

O102.4.4 Specifications for securing a structure using fencing materials. In instances where a structure cannot be secured in accordance with the standards previously provided in this section, a fence may be used. Structures of this nature include, but are not limited to, buildings burned or dilapidated to the point that the windows and/or doors cannot be used to secure the building. The use of fencing shall require prior approval by the *fire code official*, and meet these specifications:

1. 6-foot (1828.8 mm) chain link fence posts are to be anchored in concrete or a comparable approved material.
2. Gates of like materials.
3. Padlocks.
4. One strand of 7-gauge spring wire tightly woven and secured along the base of the fence.
5. Fence shall secure the perimeter of the structure(s) to prevent unauthorized entry.

SECTION O103

GENERAL FIRE SAFETY REQUIREMENTS FOR HIGH-RISE BUILDINGS

O103.1 Fire safety plan. The operator of a high-rise building is required to submit a fire safety plan to the *fire code official* for review and approval. Copies of the fire safety plan shall be distributed to all tenants and employees of the building.

O103.2 Fire safety personnel assignments. The following fire safety personnel are required in high-rise buildings:

O103.2.1 Fire safety director. The fire safety director shall:

1. Be responsible for the fire safety plan and its implementation.
2. Select qualified building service employees for a fire brigade and ensure proper training.
3. Appoint fire wardens and ensure proper training.

4. In the event of fire, ensure the fire department is immediately notified and that evacuation procedures are initiated.
5. Ensure that all life safety systems are maintained, including:
 - 5.1. Fire alarm system.
 - 5.2. Automatic fire extinguishing systems.
 - 5.3. Elevator recall system.
 - 5.4. Fire pump, emergency generator and lighting.
6. Ensure fire drills are conducted quarterly and keep written records.

O103.2.2 Fire warden. A fire warden shall be designated for each floor.

O103.2.2.1 Knowledge of fire warden. The fire wardens shall be familiar with:

1. The fire safety plan.
2. Location of exits.
3. The fire alarm system.
4. Portable fire extinguishing equipment.

O103.2.2.2 Duties of fire warden in the event of fire. In the event of a fire, fire wardens shall:

1. Execute the fire safety plan.
2. Close all doors while notifying floor occupants.
3. Direct the evacuation of the fire floor, as appropriate, to three floors below the fire or outside the building.
4. Assign a responsible person to any person who is physically challenged and in need of assistance.
5. Prevent the use of elevators.

6. Notify the fire safety director of any persons who require assistance or persons not accounted for.

O103.2.3 Fire brigade. Key building personnel shall be organized into a trained fire brigade that may include engineering, security and management personnel who shall carry out the following tasks in the event of fire.

1. When safe to do so, respond to the fire location, report on the situation and sound alarm if necessary, assist in evacuation and extinguish the fire if possible.
2. Check fire pump and emergency generator for proper operation.
3. Adjust the HVAC so that smoke is not spread throughout the building.
4. Ensure all elevators are brought to the ground floor.

O103.3 Fire safety plan. The following items shall be included in a high-rise building's fire safety plan:

O103.3.1 Emergency phone numbers. The following phone numbers are required:

1. Fire/ambulance/police: 9-1-1.
2. Management and fire safety director.
3. Security.

O103.3.2 Procedures.^a The following procedures shall be included in a high-rise building's fire safety plan:

1. RESCUE: Remove anyone from the immediate danger area.
2. CONFINE: Close the door to the room of origin to help contain the smoke and fire in that area.
3. ALERT:
 - 3.1. Activate the alarm.
 - 3.2. Call building management and give your name, the nature of the emergency and the floor number and suite.

- 3.3. Call the Dallas Fire-Rescue Department 9-1-1 and give your name; the nature of the emergency; and the building name, street address, floor and suite number.
4. FIGHT: If the fire is small and confined to one object (such as a trash can), attempt to fight the fire if the proper type of extinguisher is available, the person is familiar with extinguisher operation, and there are two ways out.

^a. NOTE: Alternate wording may be used when *approved* by the *fire code official*.

O103.3.3 Fire alarm system. A high-rise building safety plan shall:

1. Explain how the alarm system is activated:
 - 1.1. Manual pull stations;
 - 1.2. Smoke detectors/heat detectors; or
 - 1.3. Water flow/tamper alarms on the sprinkler system.
2. Explain what is activated in an alarm condition and give examples:
 - 2.1. Horns or bells, either throughout the building, on the fire floor, two floors above, one floor below, or on the fire floor only;
 - 2.2. Elevators recalled to the ground floor;
 - 2.3. Heating, ventilating, and air-conditioning systems (HVAC) on the fire floor turned off. Exhaust fans are activated to remove smoke in the building.
 - 2.4. Pressurized stairwells, if applicable.
 - 2.5. Automatically unlocks stairwell doors from the stairwell side to permit re-entry onto other floors if smoke is encountered in the stairwell. For example, if stairwell re-entry is only available on every fifth floor, signs shall be posted indicating reentry points.

O103.3.4 Evacuation procedures. When the fire alarm is activated, use the closest stairwell to evacuate:

1. To three floors below the fire floor or to the ground floor and exit the building if so instructed.
2. If the closest stairwell is blocked by fire or smoke, evacuate by an alternate stairwell.

3. If all stairwells are blocked by fire or smoke, return to an office or room and close the doors. Call the fire department (number for outside line) 9-1-1, and building management (management office number) and notify them of your location. Seal doorway openings and air-conditioning vents with towels, clothing, etc. Stay low, below the smoke, and use a wet towel to cover your mouth and nose. Break windows only as a last resort.

O103.4 Emergency plan. An emergency plan shall be provided for fire-fighter use in the control room and shall include an emergency plan layout showing:

1. Means of egress from each floor.
2. Doors through which entry to safe floor areas may be made from the stairwell.
3. Where present, the location of:
 - 3.1. Emergency power for the fire alarm system.
 - 3.2. Fire-extinguishing systems.
 - 3.3. Smoke removal system.
 - 3.4. Public address system.
 - 3.5. Two-way communication system.
 - 3.6. Fire control station.
 - 3.7. Heat, smoke and flame detectors.
 - 3.8. Elevators having manual override controls.

O103.5 General requirements for high-rise buildings. High-rise buildings shall meet the following requirements.

O103.5.1 Elevator warning signs. The operator of the premises shall post and maintain in each elevator lobby, on all floors, a sign which has the words “**IN FIRE EMERGENCY, DO NOT USE ELEVATOR. USE EXIT STAIRS.**” Existing *approved* signs that read “**ELEVATORS MAY NOT BE USED IN CASE OF FIRE -USE STAIRWELLS WHICH ARE MARKED AS EXITS**” installed prior to the adoption of this code shall be permitted. Sign shall be marked:

1. In letters at least ½ inch (12.7 mm) high and on a contrasting background.
2. With a floor evacuation diagram oriented from each posted location showing the location of at least two of the nearest stairs.

O103.5.2 Information sign. The operator of the premises shall post and maintain at the main elevator lobby a sign, which has the words, “Fire Emergency Plan Available for Review from the Management Office” of letters at least ½ inch (12.7 mm) high and on a contrasting background.

SECTION O104

LIMITED ACCESS GATES

O104.1 General. Limited access gates which obstruct fire department access roads (fire lanes) shall be installed and maintained in accordance with the provisions of this section.

O104.1.1 Plans required. Submit two sets of plans drawn to scale for plan review and approval prior to installation. See the “Limited Access Gate Requirements” handout for information required for plan designs.

O104.1.2 Building permit required. A building permit is required to install fencing over 6 feet (1828.8 mm) high.

O104.1.3 Electrical permit required. An electrical permit is required for all electrical work.

O104.1.4 Limited access gates. An annual permit is required for the operation and maintenance of limited access gates which obstruct fire apparatus access roads and which open electro-mechanically, using an *approved* Dallas Fire-Rescue Department radio receiver and transmitter.

O104.2 Design. Limited access gates which obstruct fire department access roads shall:

1. Be set back a minimum of 20 feet (6096 mm) from public access roadways.
2. Open electro-mechanically using equipment *approved* by the *fire code official* when installed at residential occupancies (to include apartments, hotels/motels, gated residential communities, etc.), institutional occupancies, and other locations when, in the opinion of the fire chief, life safety needs must be addressed. When *approved* by the *fire code official*, general business occupancies may utilize manual Knox entry equipment, such as a Knox padlock and chain.
 - 2.1. Each Dallas Fire-Rescue Department radio receiver shall comply with the following design criteria:
 - 2.1.1. Consist of a receiver having a digital channel module preset to a specified digital code designated by the fire code official;
 - 2.1.2. Be equipped with an external, weather-tight, antenna assembly;

- 2.1.3. Be equipped with a flasher unit and external lamp assembly with a red globe and guard to be mounted separate from the enclosure. This shall be wired to 115 volts and clearly visible from the entry side of the gate;
 - 2.1.4. Be located so that it can receive a clear signal from the transmitter when activated from inside responding emergency vehicles from a distance of 100 feet (30 480 mm);
 - 2.1.5. Shall override all other opening systems;
 - 2.1.6. Be protected from weather and physical damage; and
 - 2.1.7. When activated, the gate shall open at a minimum speed of 1 foot per second and remain open until closed by the fire department.
- 3. Gate designs that involve installing gates within close proximity of each other shall be relayed so that both gates will open when activated. One Dallas Fire-Rescue Department transmitter and compatible radio receiver may be used to achieve this requirement.
 - 4. A manual back-up system shall be provided for all electro-mechanical gates. It shall be accessible on the entry side of the gate, using the Knox padlock that conforms to the Dallas Fire-Rescue Department Knox security key that is used at all other locations.
 - 4.1. A fail-safe manual back-up system shall be installed to allow access through the gate in the event of operational failure.
 - 4.2. On swing gates and barrier arms, this manual system shall be designed:
 - 4.2.1. To be clearly visible and easily accessible from the entry side of the gate.
 - 4.2.2. To open manually by one person removing the Knox padlock and/or pin that is secured in the arm.
 - 4.3. On slide gates this manual system shall be designed:
 - 4.3.1. To be clearly visible and easily accessible from the entry side of the gate.
 - 4.3.2. To be mounted within 10 feet (3048 mm) of the gate and open manually by one person utilizing an approved single manual release device.
 - 5. Commercial locations not required to install radio receivers shall utilize approved manual Knox entry equipment, such as a Knox padlock and chain.

O104.3 Weather-resistant box required. The manual release device as required in Item 4 of Section O104.2 shall be protected from weather and physical damage in a weather-resistant box which is:

1. Red in color.
2. At least 5 inches high, 5 inches wide and 1½ inches deep (127 mm high, 127 mm wide and 38.1 mm deep).
3. Clearly labeled 'Fire Dept.' in white block letters 1 inch (25.4 mm) tall with a ¼-inch (6.35 mm) stroke.
4. Located within 10 feet (3048 mm) of the gate.
5. Clearly visible and easily accessible.
6. Designed to accept a Knox padlock that conforms.

O104.4 Pedestrian walkway gates. Limited access gates may be installed across pedestrian walkways provided they swing in the direction of egress travel. Gates serving as part of a required means of egress shall also comply with Chapter 10. Gates obstructing fire department access required in Section 503 shall comply with the following designs:

1. Electronic locking devices installed on pedestrian walkway gates shall have a manually operated weatherproof Knox key switch and be compatible with the Dallas Fire-Rescue Department Knox security key. In the event of a power failure or other failure of the electro-mechanical system, a fail-safe system shall automatically unlock the gate to allow free entry and exit.
2. Pedestrian walkway gates using Simplex-style doorknob locks shall conform with the attached fire department access window diagrams. Fire department access windows shall have a required minimum dimension of 9 inches by 12 inches (228.6 mm by 304.8 mm) and include a hasp for the Dallas Fire Department Knox padlock that is compatible with the Dallas Fire-Rescue Department Knox security key.

O104.5 Maintenance. The gate opening systems shall be serviced on a regular basis and maintained in an approved operating condition. Unless otherwise approved by the *fire code official*, out of service gates shall be maintained in a chained open position until repaired and acceptance tested.

1. The mechanical and electrical components shall be serviced on a regular basis and maintained in an approved operating condition.
2. A power supply shall be maintained to electronic components at all times.

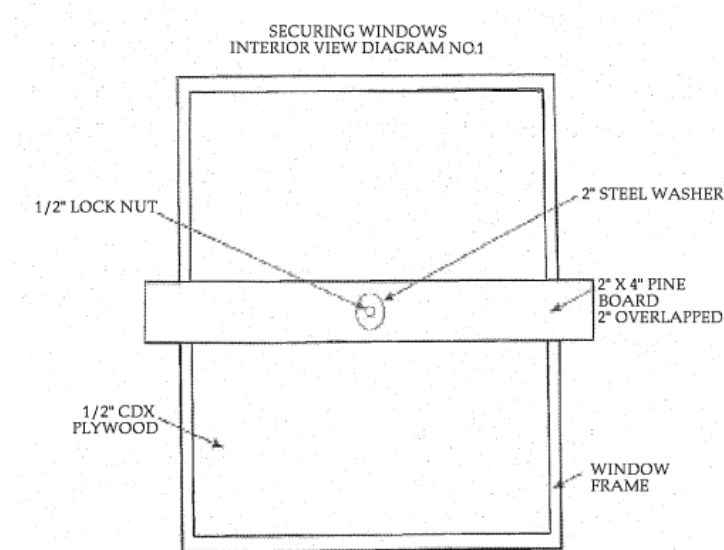
O104.6 Performance test required.

1. A performance test shall be conducted annually to verify proper operation of equipment.
2. Upon failure of the performance test, the security gate system shall be disabled and maintained in the open position until repaired and tested by the *fire code official*.

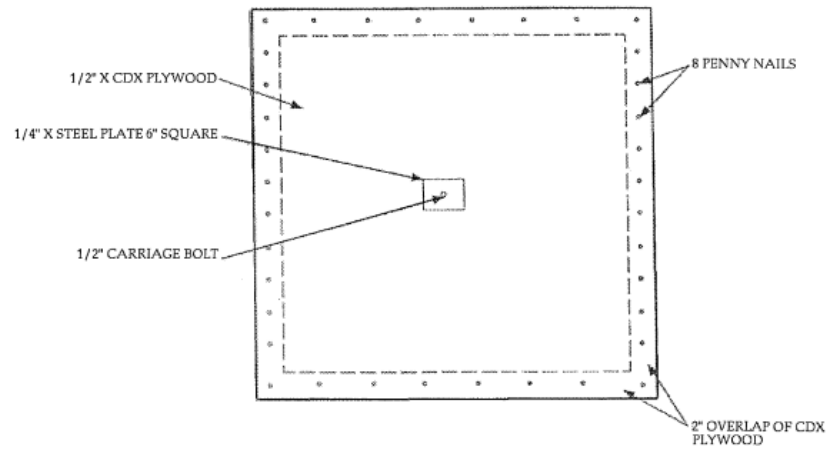
O104.7 Illegal secondary obstructions to limited access gates.

1. Barrier arms in front of access gates are not allowed.
2. Magnetic locking devices interconnected to Dallas Fire-Rescue Department radio receivers on limited access gates are prohibited.

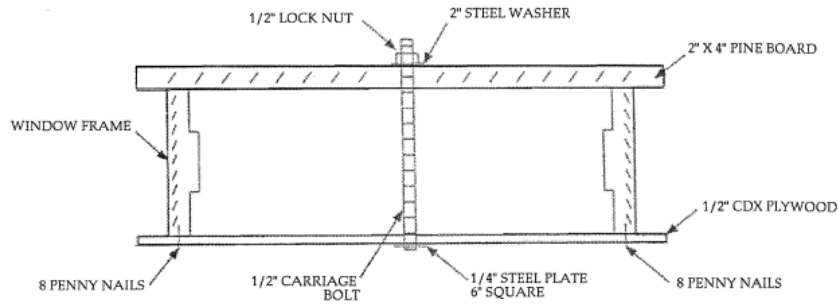
O104.8 Appendix O Diagrams and Examples.



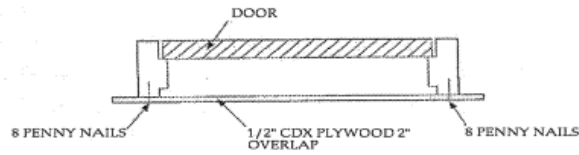
EXTERIOR VIEW DIAGRAM NO. 1A



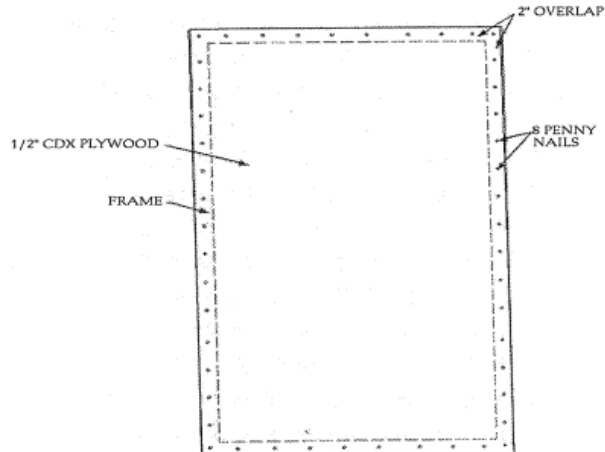
SECURING WINDOWS
TOP VIEW CROSS SECTION DIAGRAM NO. 1B



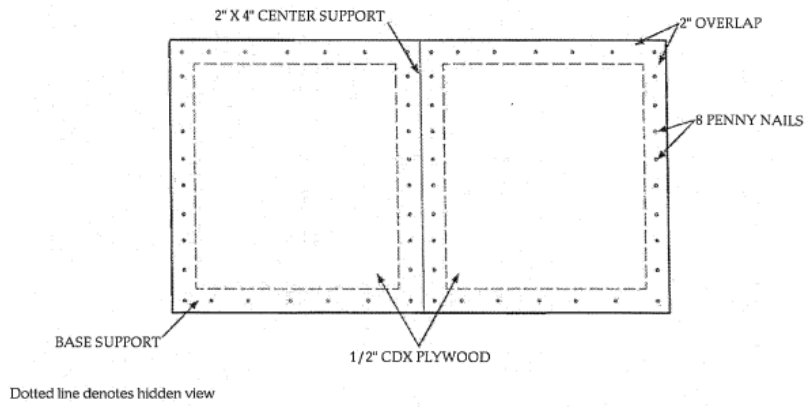
TOP VIEW CROSS SECTION
DIAGRAM NO. 2

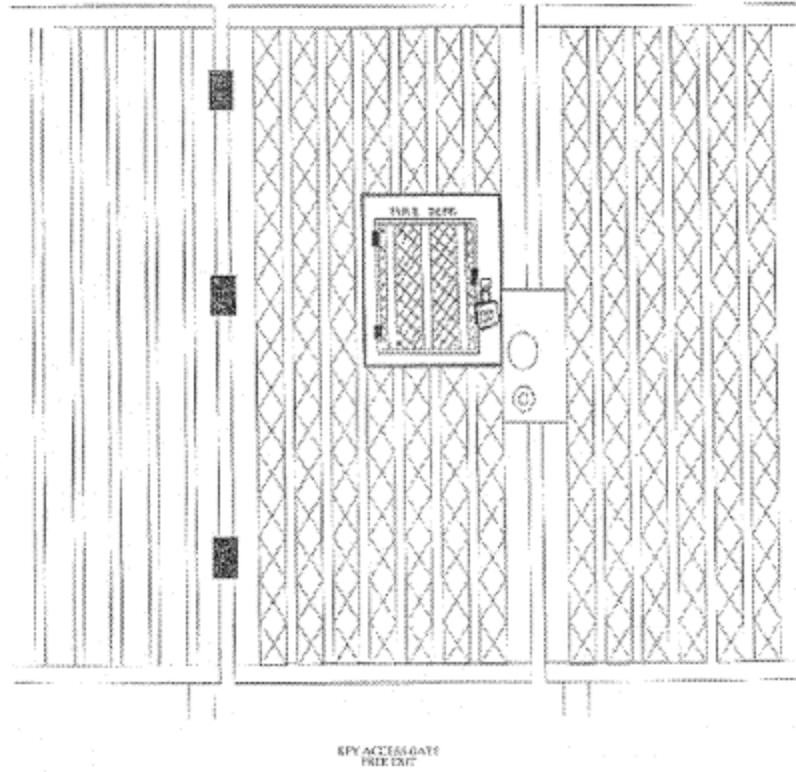


EXTERIOR VIEW
DIAGRAM NO. 2A

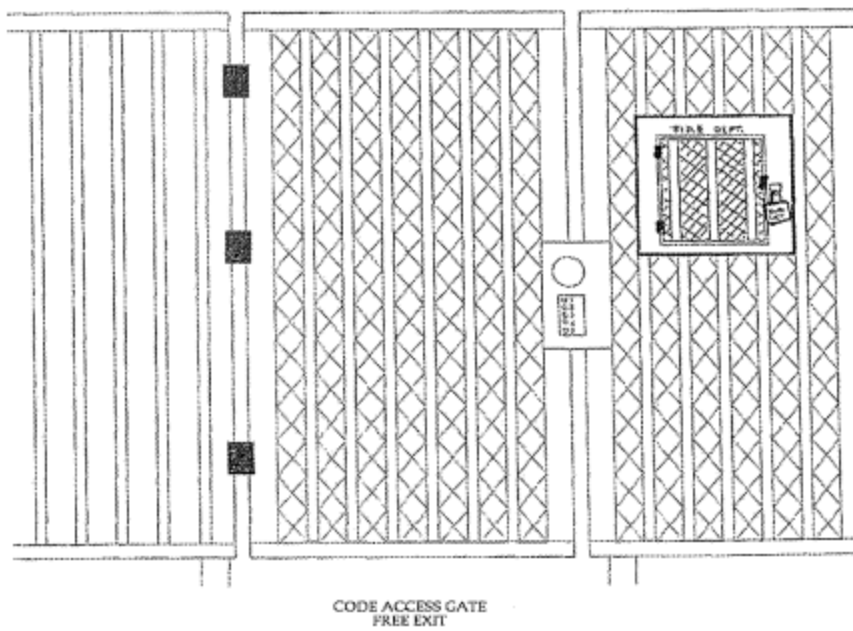


SECURING OVERSIZED OPENINGS
EXTERIOR DIAGRAM NO. 3

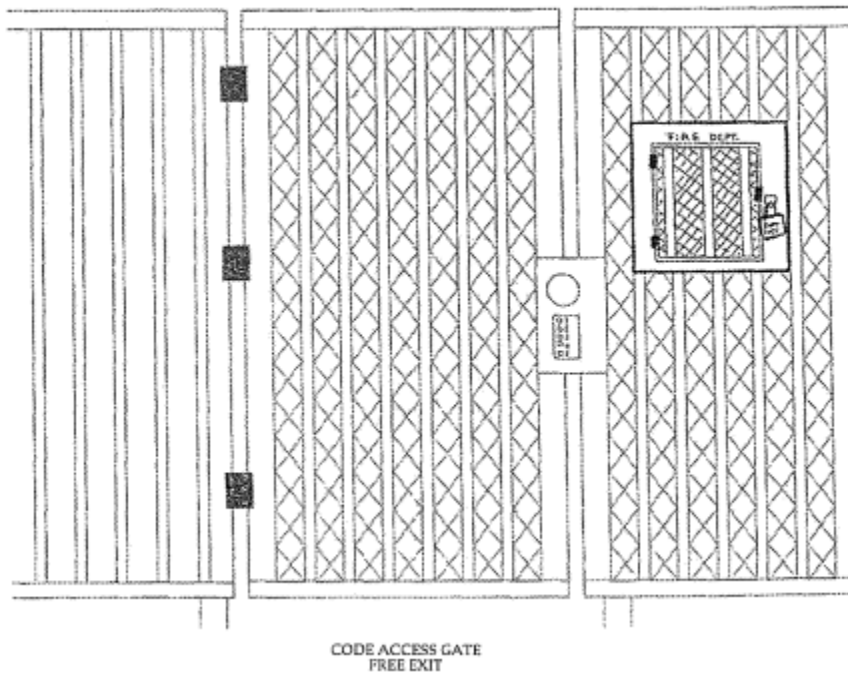




PEDESTRIAN WALKWAY SECURITY GATES



PEDESTRIAN WALKWAY SECURITY GATES



288. All chapters of the 2021 International Fire Code adopted by this ordinance are subchapters of Chapter 16 of the Dallas City Code, as amended.

289. All references in the 2021 International Fire Code to the building code, plumbing code, mechanical code, electrical code, residential code, existing building code, energy conservation code, fuel gas code, green construction code, and swimming pool and spa code refer, respectively to Chapters 53, 54, 55, 56, 57, 58, 59, 60, 61, and 62 of the Dallas City Code.

SECTION 2. Any errata corrections of the 2021 International Fire Code published by the International Fire Code Institute are considered as part of this code.

SECTION 3. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities, penalties, and forfeitures may be instituted, and causes of action pending on the effective date of this ordinance may proceed, as if the former laws applicable at the time the offense, liability, penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or superseded, and all former laws will continue in effect for these purposes.

SECTION 4. That Chapter 16 of the Dallas City Code, as amended, will remain in full force and effect, save and except as amended by this ordinance. Any existing structure, system, development project, or registration that is not required to come into compliance with a requirement of this ordinance will be governed by the requirement as it existed in the former law last applicable to the structure, system, development project, or registration, and all former laws will continue in effect for this purpose.

SECTION 5. That the terms and provisions of this ordinance are severable and are governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

SECTION 6. That this ordinance shall take effect on February 10, 2023, in accordance with the Charter of the City of Dallas, and it is accordingly so ordained.

APPROVED AS TO FORM:

CHRISTOPHER J. CASO, City Attorney

By _____
Assistant City Attorney

Passed _____