161124 6-22-16

# ORDINANCE NO. 30135

An ordinance amending Chapter 16, "Dallas Fire Code," of the Dallas City Code, as amended; adopting with certain changes the 2015 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 2015 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. Pages xxi-xxii, "Legislation," are deleted.

2. Subsection 101.1, "Title," of Section 101, "Scope and General Requirements," of Part 1, "General Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended to read as follows:

"**101.1 Title.** These regulations shall be known as the <u>Dallas</u> Fire Code [of [NAME OF JURISDICTION]], hereinafter referred to as 'this code.'"

3. Section 101, "Scope and General Requirements," of Part 1, "General Provisions," of

Chapter 1, "Scope and Administration," of the 2015 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."

4. Subsection 102.1, "Construction and Design Provision," of Section 102,

"Applicability," of Part 1, "General Provisions," of Chapter 1, "Scope and Administration," of

the 2015 International Fire Code is amended to read as follows:

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

- 1. Structures, facilities and conditions arising after the adoption of this code.
- 2. Existing structures, facilities and conditions not legally in existence at the time of adoption of this code.
- 3. Existing structures, facilities and conditions when required in Chapter 11 or in specific sections of this code.
- 4. Existing structures, facilities and conditions which, in the opinion of the *fire code official*, constitute a distinct hazard to life or property."
  - 5. Subsection 102.4, "Application of Building Code," of Section 102, "Applicability,"

of Part 1, "General Provisions," of Chapter 1, "Scope and Administration," of the 2015

International Fire Code is amended to read as follows:

"102.4 Application of <u>other</u> [building] codes. The design and construction of new structures shall comply with <u>this code and other codes as applicable</u> [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 <u>Dallas</u> [International] Building Code, shall be made in accordance therewith."

#### 6. Subsection 102.7, "Referenced Codes and Standards," of Section 102,

"Applicability," of Part 1, "General Provisions," of Chapter 1, "Scope and Administration," of

the 2015 International Fire Code is amended to read as follows:

"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 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, and the International Residential Code, respectively mean the Dallas Mechanical Code, the Dallas Fuel Gas Code, the Dallas Energy Conservation Code, the Dallas Electrical Code, the Dallas Electrical Code, the Dallas Electrical Code, the Dallas Electrical Code, the Dallas Plumbing Code, the Dallas Electrical Code, and the Dallas Electri

7. Paragraph 102.7.2, "Provisions in Referenced Codes and Standards," of

Subsection 102.7, "Referenced Codes and Standards," of Section 102, "Applicability," of Part 1,

"General Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire

Code is amended to read as follows:

"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 and any adopted amendments, the provisions of this code and any adopted amendments, as applicable, shall take precedence over the provisions in the referenced code or standard."

8. Section 103, "Department of Fire Prevention," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is retitled as Section 103, "Division of Fire Prevention."

9. Subsection 103.1, "General," of Section 103, "Division of Fire Prevention," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended to read as follows:

"103.1 General. The <u>division</u> [department] of fire prevention is established within the jurisdiction under the direction of the *fire <u>chief</u>* [code official]. The function of the <u>division</u> [department] shall be the implementation, administration and enforcement of the provisions of this code."

10. Subsection 103.2, "Appointment," of Section 103, "Division of Fire Prevention,"

of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015

International Fire Code is amended to read as follows:

"103.2 Appointment <u>of the fire marshal</u>. The *fire <u>chief</u>* [*code official*] 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. [shall be appointed by the chief appointing authority of the jurisdiction; and t]The *fire marshal* [*code official*] 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."

11. Section 103, "Division of Fire Prevention," of Part 2, "Administrative

Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is

amended by adding a new Subsection 103.5, "Fire Prevention Division Personnel and Police," to

read as follows:

"103.5 Fire prevention division personnel and police. The fire chief 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."

12. Subsection 104.1, "General," of Section 104, "General Authority and

Responsibilities," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and

Administration," of the 2015 International Fire Code is amended to read as follows:

"104.1 General. The *fire <u>chief</u> [code official]* is hereby authorized to enforce the provisions of this code and 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 and shall not have the effect of waiving requirements specifically provided for in this code. <u>Under the *fire chief's* direction, the fire department is authorized to enforce all state laws, city ordinances and executive orders of the jurisdiction.</u>

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13. Subsection 104.2, "Applications and Permits," of Section 104, "General Authority

and Responsibilities," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and

Administration," of the 2015 International Fire Code is amended to read as follows:

"104.2 Applications and permits. The *fire <u>chief</u> [code official]* is authorized to receive applications, review *construction documents* [and issue permits for construction regulated by this code], issue permits for operations regulated by this code, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code."

14. Paragraph 104.6.1, "Approvals," of Subsection 104.6, "Official Records," of

Section 104, "General Authority and Responsibilities," of Part 2, "Administrative Provisions,"

of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended to

read as follows:

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

15. Subsection 104.10, "Fire Investigations," of Section 104, "General Authority and

Responsibilities," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code

is amended to read as follows:

"104.10 Fire investigations. The [*fire* code official, the] fire department <u>is authorized</u> [or other responsible authority shall have the authority] to promptly investigate the cause, origin and circumstances of each and every [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."

16. Subsection 104.11, "Authority at Fires and Other Emergencies," of Section 104,

"General Authority and Responsibilities," of Part 2, "Administrative Provisions," of Chapter 1,

"Scope and Administration," of the 2015 International Fire Code is amended to read as follows:

"104.11 Authority at fires and other emergencies. The fire chief or officer of the fire department in charge at the scene of a fire or other emergency involving the protection of life or property or any part thereof, shall have the authority to direct such operation as necessary to extinguish or control any fire, perform any rescue operation, investigate the existence of suspected or reported fires, gas leaks or other hazardous conditions or situations, or take any other action necessary in the reasonable performance of duty. The fire chief is authorized to investigate the cause, origin and circumstances of unauthorized releases of hazardous materials. In the exercise of such power, the fire chief is authorized to prohibit any person, vehicle, vessel or thing from approaching the scene and is authorized to remove, or cause to be removed or kept away from the scene, any vehicle, vessel or thing which could impede or interfere with the operations of the fire department and, in the judgment of the fire chief, any person not actually and usefully employed in the extinguishing of such fire or in the preservation of property in the vicinity thereof."

17. Section 104, "General Authority and Responsibilities," of Part 2, "Administrative

Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is

amended by adding a new Subsection 104.12, "Procedure," to read as follows:

"104.12 Procedure. The following procedures apply to fire investigations:

**104.12.1 Written report.** The fire chief 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.

**104.12.2 Insurance information.** At the request of the fire chief, 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.

**104.12.3 Inspections.** The fire chief 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.

**104.12.4 Hearings.** The fire chief 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.

**104.12.5 Prosecution.** After investigation, if the fire chief 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."

18. Section 105, "Permits," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is retitled as Section 105, "Permits and Fees."

19. Paragraph 105.1.2, "Types of Permits," of Subsection 105.1, "General," of Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is deleted.

20. Paragraph 105.1.6, "Annual Permit," of Subsection 105.1, "General," of Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is deleted.

21. Paragraph 105.2.2, "Inspection Authorized," of Subsection 105.2, "Application," of Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended to read as follows:

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

22. Paragraph 105.2.3, "Time Limitation of Application," of Subsection 105.2, "Application," of Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is deleted.

23. Paragraph 105.2.4, "Action on Application," of Subsection 105.2, "Application," of Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended to read as follows:

"105.2.4 Action on application. The *fire code official* shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the *construction documents* do not conform to the requirements of pertinent laws, the fire <u>chief</u> [code official] shall reject such application in writing, stating the reasons therefor. If the *fire code official* is satisfied that the proposed work or operation conforms to the requirements of this code and laws and ordinances applicable thereto, the *fire code official* shall issue a permit therefor as soon as practicable."

24. Subsection 105.3, "Conditions of a Permit," of Section 105, "Permits and Fees,"

of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015

International Fire Code is amended to read as follows:

"105.3 Conditions of a permit. A permit shall constitute permission to maintain, store or handle materials; or to conduct processes which 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 105.6 or 105.7. 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."

25. Paragraph 105.3.1, "Expiration," of Subsection 105.3, "Conditions of a Permit,"

of Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter 1, "Scope

and Administration," of the 2015 International Fire Code is amended to read as follows:

"105.3.1 Expiration. A[n 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 no changes have been made or will 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."

26. Paragraph 105.3.3, "Occupancy Prohibited before Approval," of Subsection 105.3, "Conditions of a Permit," of Section 105, "Permits and Fees," of Part 2, "Administrative

Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is

amended as to read as follows:

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

27. Paragraph 105.3.4, "Conditional Permits," of Subsection 105.3, "Conditions of a

Permit," of Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter

1, "Scope and Administration," of the 2015 International Fire Code is deleted.

28. Paragraph 105.3.6, "Compliance with Code," of Subsection 105.3, "Conditions of

a Permit," of Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter

1, "Scope and Administration," of the 2015 International Fire Code is amended to read as

follows:

"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.]"

29. Subsection 105.6, "Required Operational Permits," of Section 105, "Permits and

Fees," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the

2015 International Fire Code is amended to read as follows:

"**105.6 Required** [operational] permits. The *fire code official* is authorized to issue [operational] permits for the operations set forth in Sections 105.6.1 through 105.6.52[47].

**105.6.1 Aerosol products.** A[n operational] permit is required to manufacture, store or handle an aggregate quantity of Level 2 or Level 3 aerosol products in excess of 500 pounds (227 kg) net weight.

105.6.2 Amusement buildings. A[n operational] permit is required to operate a special amusement building.

**105.6.3** Aviation facilities. A[n 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.

**105.6.4 Carbon Dioxide systems used in beverage dispensing applications.** A[n - perational] permit is required for carbon dioxide systems used in beverage dispensing applications having more than 100 pounds of carbon dioxide.

105.6.5 Carnivals and fairs. A[n operational] permit is required to conduct a carnival or fair.

**105.6.6** <u>Asphalt (tar) kettles.</u> 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.]

**105.6.7** <u>Reserved.</u> [Combustible dust-producing operations. An operational permit is required to operate a grain elevator, flour 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.]

**105.6.8 Combustible fibers.** A[n operational] permit is required for the storage and handling of combustible fibers in quantities greater than 100 cubic feet (2.8 m<sup>3</sup>).

**Exception:** A permit is not required for agricultural storage.

**105.6.9 Compressed gases.** A[n 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 105.6.8.

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

#### **TABLE 105.6.9**

#### PERMIT AMOUNTS FOR COMPRESSED GASES

	AMOUNT
TYPE OF GAS	(cubic feet at NTP)
Corrosive	200
Flammable (except cryogenic fluids and	200
liquefied petroleum gases)	
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 =  $0.02832 \text{ m}^3$ .

a. For carbon dioxide used in beverage dispensing applications, see Section 105.6.4.

#### 105.6.10 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.]

**105.6.11** Cryogenic fluids. A[n operational] permit is required to produce, store, transport on site, use, handle or dispense cryogenic fluids in excess of the amounts listed in Table 105.6.10.

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.

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

# **TABLE 105.6.10**

For SI: 1 gallon = 3.785 L.]

105.6.12 Cutting and welding. A[n operational] permit is required to conduct cutting or welding operations within the jurisdiction.

**105.6.13 Dry cleaning.** A[n 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.

105.6.14 Exhibits and trade shows. A[n operational] permit is required to operate exhibits and trade shows.

**105.6.15 Explosives.** A[n operational] permit is required for the manufacture, <u>transportation</u>, storage, handling, sale or use of any quantity of *explosive*, *explosive* material, 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.

**105.6.16** <u>Reserved.</u> [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 accessible to 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.]

**105.6.17 Flammable and combustible liquids.** A[n 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 when 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. <u>This includes tanks, lines, monitor wells and other appurtenances of the tank system.</u>
- 7. To <u>remove</u>, <u>abandon</u>, <u>or</u> place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or *combustible* liquid tank. <u>This includes tanks, lines, monitor wells, and other appurtenances of the tank system.</u>
- 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*.
- 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.]
- 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.]"

**105.6.18 Floor** <u>or wall</u> finishing. A[n operational] permit is required for floor <u>or wall</u> finishing or surfacing operations exceeding 350 square feet (33 m<sup>2</sup>) using Class I or Class II liquids.

**105.6.19 Fruit and crop ripening.** A[n operational] permit is required to operate a fruit-, or crop-ripening facility or conduct a fruit-ripening process using ethylene gas.

**105.6.20** <u>Reserved.</u> [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.]

**105.6.21 Hazardous materials.** A[n operational] permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the amounts *listed* in Table 105.6.21.

105.6.22 HPM facilities. A[n operational] permit is required to store, handle or use hazardous production materials.

[Table 105.6.21 is adopted with no amendments.]

**105.6.23 High-piled storage.** A[n operational] permit is required to use a building or portion thereof as a high-piled storage area exceeding 500 square feet (46 m<sup>2</sup>).

**105.6.24 Hot work operations.** A[n 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 <u>at construction sites or</u> 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 [wildfire] hazardous fire area.
- 5. Application of roof coverings with the use of an open-flame device.
- 6. <u>Mobile Welding/Cutting (Hot Works) apparatus</u>. 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 26. 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 a form stating he has received a copy of the regulations.

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

6.4. A separate permit is required for each separate activity and location where these activities are being conducted.

**105.6.25 Industrial ovens.** A[<del>n operational</del>] permit is required for operation of industrial ovens regulated by Chapter 30.

**105.6.26 Lumber yards and woodworking plants.** A[n operational] permit is required for the storage or processing of lumber exceeding 100,000 board feet (8,333 ft<sup>3</sup>) (236m<sup>3</sup>).

105.6.27 Liquid or-gas-fueled vehicles or equipment in assembly buildings. A[H] operational] permit is required to display, operate or demonstrate liquid-or gas-fueled vehicles or equipment in assembly buildings.

**105.6.28 LP-gas.** A[n 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. <u>The use of [Operation of cargo tankers that transport</u>] LP-gas <u>for demonstration or</u> <u>portable cooking equipment</u>. See Chapter 61.

**105.6.29 Magnesium.** A[n operational] permit is required to melt, cast, heat treat or grind more than 10 pounds (4.54 kg) of magnesium.

105.6.30 Miscellaneous combustible storage. A[n operational] permit is required to store in any building or upon any premises in excess of 2,500 cubic feet (71 m<sup>3</sup>) gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork or similar combustible material.

**105.6.31** <u>Reserved.</u> [Motor fuel-dispensing facilities. An operational permit is required for the operation of automotive, marine and fleet motor fuel dispensing facilities.]

**105.6.32 Open burning.** A[n 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 adhered to.

[Exception: Recreational fires.]

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

**105.6.32.2** 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.

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

**105.6.34 Open flames and candles.** A[n 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.

**105.6.35** <u>Reserved.</u> [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.]

105.6.36 <u>Reserved.</u> [*Places of assembly.* An operational permit is required to operate a place of assembly.]

**105.6.37 Private fire hydrants <u>and water supplies</u>.** An <u>annual</u> [operational] permit is required for the [removal from service,] use or operation of private fire hydrants <u>or alternate</u> water supplies.

[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.]

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

**105.6.39** <u>Reserved.</u> [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.]

**105.6.40 Refrigeration equipment.** An <u>annual</u> [operational] permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6.

**105.6.41** <u>Reserved.</u> [*Repair garages and motor fuel-dispensing facilities.* An operational permit is required for operation of repair garages.]

105.6.42 <u>Reserved.</u> [Rooftop heliports. An operational permit is required for the operation of a rooftop heliport.]

**105.6.43 Spraying or dipping.** A[n 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.

105.6.44 Storage of scrap tires and tire byproducts. A[n operational] permit is required to establish, conduct or maintain storage of scrap tires and tire byproducts that exceeds 2,500 cubic feet (71 m<sup>3</sup>) of total volume of scrap tires, and for indoor storage of tires and tire byproducts.

**105.6.45 Temporary membrane structures, tents and canopies.** A[n operational] permit is required to operate an air-supported temporary membrane structure[, a temporary stage canopy] or a tent having an area in excess of <u>399</u> [400] square feet (37 m<sup>2</sup>) or a canopy in excess of <u>399</u> [400] square feet (37 m<sup>2</sup>).

#### **Exceptions:**

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

**105.6.46 Tire-rebuilding plants.** A[<del>n operational</del>] permit is required for the operation and maintenance of a tire rebuilding plant.

**105.6.47 Waste handling.** A[n-operational] permit is required for the operation of wrecking yards, junk yards and waste material-handling facilities.

**105.6.48** Acetylene generator. A permit is required to operate an acetylene generator. See Chapter 35. [Wood products. An operational permit is required to store chips, hogged material, lumber or plywood in excess of 200 cubic feet (6  $m^3$ ).]

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

**105.6.50 Calcium carbide storage.** A permit is required to store more than 200 pounds of calcium carbide. See Chapter 35.

**105.6.51 Limited access gates.** An annual permit is required for the operation 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.

**105.6.52** 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.

**105.6.53 State licensed facilities.** An annual permit is required to operate a child care facility, adult day care facility, 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. Paragraph 105.7.4, "Cryogenic Fluids," of Subsection 105.7, "Required Construction Permits," of Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended to read as follows:

"[[A]]105.7.4 <u>Reserved.</u> [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 105.6.11. Maintenance performed in accordance with this code is not considered to be an alteration and does not require a construction permit.]"

31. Paragraph 105.7.14, "Smoke Control or Smoke Exhaust Systems." of Subsection 105.7, "Required Construction Permits," of Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended to read as follows:

"105.7.14 <u>Reserved.</u> [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.]"

32. Paragraph 105.7.18, "Temporary Membrane Structures and Tents," of Subsection

105.7, "Required Construction Permits," of Section 105, "Permits and Fees," of Part 2,

"Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015

International Fire Code is amended to read as follows:

"105.7.18 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 <u>399</u> [400] square feet ( $37 \text{ m}^2$ ). Tents and/or other membrane structures shall not be erected on the top/roof of an existing structure without first providing acceptable documentation of the structural integrity of the existing building to support the anticipated live and static loads to the *fire code official*.

#### **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 canopies shall have a maximum size of 700 square feet  $(65 \text{ m}^2)$ .
  - 3.2. The aggregate area of multiple <u>canopies</u> [tents] placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet  $(65 \text{ m}^2)$  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."

33. Subsection 105.7, "Required Construction Permits," of Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the

2015 International Fire Code is amended by adding a new Subsection 105.7.19, "Electronic

Access Control Systems," to read as follows:

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

34. Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of

Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended by

adding a new Subsection 105.8, "Fees and Permits Schedule," to read as follows:

"105.8 Fees and permits schedule. An applicant for a permit required by Section 105.6 shall pay, upon issuance of the permit, a nonrefundable permit fee in accordance with the following schedule.

1.	Acetylene generator, annual	\$300.00
2.	Aerosol products, annual	\$250.00
3.	Air curtain incinerator/pit/trench burn, per day	\$404.00
4.	Amusement building	\$150.00
5.	Asphalt (tar) kettles, annual	\$199.00
6.	Aviation facilities	\$300.00
7.	Calcium carbide storage, annual	\$300.00
8.	Candle and open flames	\$125.00
9.	Carnivals and fairs, daily	\$200.00
10.	Combustible storage (miscellaneous), annual	\$250.00
11.	Commercial cooking fire-extinguishing system	\$267.00
12.	Compressed gas filling/storage/use, annual	\$250.00
13.	Cryogenic fluids, annual	\$250.00
14.	Dry cleaning plant, annual	\$300.00
15.	Explosive /blasting, daily	\$450.00
16.	Fireworks/explosive storage, daily	\$300.00
17.	Fireworks/explosive transportation, daily	\$300.00
18.	Fireworks display (initial)	\$500.00
19.	Fireworks display (subsequent)	\$300.00
20.	Flammable and combustible liquids, annual	\$250.00
21.	Floor/wall finishing	\$150.00
22.	Fruit and crop ripening, annual	\$279.00
23.	Hazardous materials, annual	\$550.00
24.	Hazardous production material (HPM), annual	\$550.00
25.	High pile storage, annual	\$200.00
26.	Industrial oven	\$250.00

27. Limited access gates	
(1 to 3 gates)	\$250.00
(4 to 7 gates)	\$300.00
(8 or more gates)	\$400.00
28. Liquid- or gas-fueled vehicles or equipment in assembly	
buildings, per event:	
(1 to 10 vehicles or pieces of equipment)	\$200.00
(11 to 30 vehicles or pieces of equipment)	\$300.00
(31 or more vehicles or pieces of equipment)	\$400.00
(over 400 vehicles or pieces of equipment)	\$500.00
29. LP-gas storage/use	\$254.00
30. LP-gas demonstration/portable cooking [CART]	\$150.00
31. LP-gas demonstration/portable cooking [VEHICLE]	\$300.00
32. Lumber yards and woodworking plants, annual	\$269.00
33. Magnesium, annual	\$250.00
34. Mobile fueling	
(site survey), annual	\$400.00
(vehicle inspection) annual	\$300.00
35. Open burning/recreational fires	\$250.00
36. Private fire hydrant and water supplies, annual	\$350.00
37. Pyrotechnic special effects material, daily:	
Initial performance	\$300.00
Subsequent performances	\$300.00
38. Refrigeration equipment	\$205.00
39. Scrap tire storage, annual	\$200.00
40. Spray painting/dipping	\$200.00
41. State licensed facilities	
(child care facility), annual 35 Children or less	\$150.00
(child care facility), annual 36 Children or more	\$200.00
(residential care facility, annual	\$200.00
(small assisted living), annual	\$200.00
(adult day care facility), annual	\$200.00
42. Temporary membrane structures and tents,	
Including plan review (per event)	\$300.00
43. Tire-rebuilding plant	\$200.00
44. Torch and open flames	\$200.00
45. Waste handling, annual	\$250.00
47. Welding/cutting/hot works	\$194.00"

35. Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended by adding a new Subsection 105.8, "Standby Personnel/Fire Watch Fee," to read as follows:

"105.8 Standby Personnel/Fire Watch fee. The standby personnel/fire watch fees shall be calculated as follows:

New Construction Staffing - Regular hours, per inspector-per hour	\$ 120.00
New Construction Staffing - Overtime hours, per inspector-per hour	\$ 120.00
New Construction Re-tests (fee)	\$ 622.00
Special Event/Trade Show Staffing - Regular hours, per inspector-per hour	\$ 120.00
Special Event/Trade Show Staffing - Overtime hours, per inspector-per hour	\$ 120.00
Standby Personnel/Fire Watch Staffing - Regular hours, per inspector-per hour	\$ 120.00
Standby Personnel/Fire Watch Staffing - Overtime hours, per inspector-per hour	\$ 120.00

**105.8.1 When required.** Whenever a building or premises in the city is required to provide standby personnel or a fire watch, the owner, occupant, operator or other responsible person shall pay to the fire department a fee in accordance with the following schedule.

**105.8.2 Failure to pay.** A person commits an offense if he fails to pay the fee assessed under Section 105.8.1 to the Dallas Fire-Rescue Department within 30 calendar days after the date of services provided."

36. Section 105, "Permits and Fees," of Part 2, "Administrative Provisions," of

Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended by

adding a new Subsection 105.9, "Reinspection Fee," to read as follows:

"**105.9 Reinspection fee.** Reinspection fees shall be assessed in accordance with Sections 105.9.1 and 105.9.2.

**105.9.1 When required.** 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 <sup>ST</sup>	\$0
2 <sup>ND</sup>	\$100
3 <sup>RD</sup> AND EACH SUBSEQUENT	\$105

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.

**105.9.2 Failure to pay.** A person commits an offense if he fails to pay a reinspection fee assessed under Section 105.9.1 to the city assessor and collector of taxes within 60 calendar days after the date of reinspection."

37. Section 108, "Board of Appeals," of Part 2, "Administrative Provisions," of

Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended to read

as follows:

#### "SECTION 108 BOARD OF APPEALS

[A] 108.1 <u>Creation, membership and qualifications.</u> 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. <u>Two registered engineers</u>, 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.
- <u>4.</u> 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.

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- <u>6.</u> One person experienced in the practice or technique of managing large public assembly <u>functions.</u>
- 7. Two persons having a record of active participation in community affairs.

[**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 governing body and shall hold office at its pleasure. The *fire code official* shall be an ex-officio member of said board but shall have no vote on any matter before the board. 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] 108.1.2 Ex-officio members. In addition to the nine board members enumerated in Section 108.1, the building official and fire marshal shall serve as ex-officio members of the board without voting privileges.

[A] 108.2 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 method of protection or safety is proposed. The board shall have no authority to waive requirements of this code.

[A] 108.3 <u>Appointment and terms.</u> The city manager shall nominate and the city council shall appoint the nine board members enumerated in Section 108.1 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] 108.4 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.

[A] 108.5 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.

[A] 108.6 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 marshal 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 marshal 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.

[A] 108.7 Stay of appeal. During the pendency of the request to the board, the decision appealed from will be stayed unless the fire marshal 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."

38. Paragraph 109.3.1, "Service," of Subsection 109.3, "Notice of Violation," of

Section 109, "Violations," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and

Administration," of the 2015 International Fire Code is amended to read as follows:

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

39. Subsection 109.4, "Violation Penalties," of Section 109, "Violations," of Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is amended to read as follows:

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"[A] **109.4 Violation penalties.** Persons who shall <u>knowingly</u> violate a provision of this code or shall <u>knowingly</u> fail to comply with any of the requirements thereof or who shall <u>knowingly</u> 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 <u>Class C misdemeanor</u> [<del>SPECIFY OFFENSE]</del>], 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.

**109.4.1** 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.

[A] 109.4.2 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.

**[A] 109.4.3 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*."

40. Subsection 110.2, "Evacuation," of Section 110, "Unsafe Buildings," of Part 2,

"Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015

International Fire Code is amended to read as follows:

"[A] **110.2 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 building deemed unsafe when such building has hazardous conditions that present imminent danger to building occupants. Persons so notified shall immediately leave the structure,  $[\Theta r]$  premises <u>or vehicle</u> 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] 110.2.1 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."

41. Subsection 110.4, "Abatement," of Section 110, "Unsafe Buildings," of Part 2,

"Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015

International Fire Code is amended to read as follows:

"[A] **110.4 Abatement.** The owner, the owner's authorized agent, operator or occupant of a building or premises 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. See the procedures specified in Chapter 27, 'Minimum Urban Rehabilitation Standards,' of the *Dallas City Code.*"

42. Subsection 111.4, "Failure to Comply," of Section 111, "Stop Work Order," of

Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of the 2015

International Fire Code is amended to read as follows:

"[A] 111.4 Failure to comply. Any person who shall <u>knowingly</u> continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than \$1,000 [[AMOUNT] dollars] or more than \$2,000 [[AMOUNT] dollars]."

43. Subsection 113.5, "Refunds," of Section 113, "Fees," of Part 2, "Administrative

Provisions," of Chapter 1, "Scope and Administration," of the 2015 International Fire Code is

deleted.

44. Part 2, "Administrative Provisions," of Chapter 1, "Scope and Administration," of

the 2015 International Fire Code is amended by adding a new Section 114, "Certificate of

Occupancy," to read as follows:

#### **"SECTION 114 CERTIFICATE OF OCCUPANCY**

[A] 114.1 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] 114.2 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] 114.3 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] 114.4 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, "Administrative Provisions," of Chapter 1, "Scope and Administration," of

the 2015 International Fire Code is amended by adding a new Section 115, "Registration and

Inspection of High Risk Buildings and Occupancies," to read as follows:

#### "SECTION 115 REGISTRATION AND INSPECTION OF HIGH RISK BUILDINGS AND OCCUPANCIES

[A] 115.1 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.

[A] 115.2 Display of certificate. A registrant shall present, upon request, a certificate of registration for examination by the fire chief.

[A] 115.3 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 forage 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.

**[A] 115.3.1 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 113.3 must be provided for each building or occupancy at that address.

[A] 115.3.2 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.

[A] 115.4 Registration fee and inspection charge. The fee for a certificate of registration for a high risk occupancy is \$25, plus an inspection charge in accordance with the following schedule.

BUILDING TYPE:

**INSPECTION FEE:** 

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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	\$250.00
100,000 square feet and over	\$300.00
Hazardous Materials	
Under 5,000 square feet	\$250.00
5,000 9,999 square feet	\$250.00
10,000 59,999 square feet	\$300.00
60,000 99,999 square feet	\$313.00
100,000 square feet and over	\$400.00
High-rise Office/Storage/Assembly	
Under 200,000 square feet	\$250.00
200,000 600,000 square feet	\$260.00
Over 600,000 square feet	\$291.00
High-rise Residential	
Under 250 dwelling units	\$300.00
250 to 600 dwelling units	\$439.00
Over 600 dwelling units	\$550.00
Health Care Facilities	
Under 100 patient rooms or individual dwelling units	\$300.00
100-500 patient rooms or individual dwelling units	\$550.00
Over 500 patient rooms or individual dwelling units	\$650.00

#### **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*:
  - a. Amusement building.
  - b. Aviation facilities.
  - c. Dry cleaning plant.
  - d. Lumber yards and woodworking plants.
  - e. 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 of Dallas property taxes.

3. The inspection charge shall not be assessed for any property that has a current vacant building certificate of registration from the City of Dallas.

[A] 115.4.1 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.

[A] 115.4.2 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.

[A] 115.5 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] 115.5.1 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.

[A] 115.6 Non-transferability. A certificate of registration for a high risk building or occupancy is not transferable.

[A] 115.7 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.

[A] 115.7.1 Frequency. The *fire code official* shall inspect a high risk building or occupancy at least once during the term of the certificate of registration.

[A] 115.7.2 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.

[A] 115.7.3 Reinspection. Whenever a high risk building or occupancy is inspected by the *fire code official* and a violation of Section 115 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 105.9.

[A] 115.8 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 the 2015

International Fire Code is amended by adding or amending 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 used as <u>aircraft</u> [motor] fuels are stored and dispensed from fixed automotive-type <u>dispensing</u> equipment into the fuel tanks of aircraft <u>and</u> shall include all facilities essential thereto.

**[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. This group may include but not be limited to the following:

- Dialysis centers

- Procedures involving sedation

- Sedation dentistry

- Surgery centers

- Colonic centers

- Psychiatric centers

**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 <u>effects</u>.

**CERTIFICATE OF REGISTRATION.** A written authority issued under Section 115 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 <u>approved fire walls</u>, 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 [authority] uniformed members of the Inspection and Life Safety Education Division charged with the administration and enforcement of the <u>Dallas Fire Code</u> [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 [individuals] standby

personnel when required by the fire chief, 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 <u>combustible</u> [composition] or <u>explosive</u> composition, or any substance, <u>combination of substances or</u> device <u>prepared</u> for the purpose of producing a visible or an audible effect [for entertainment purposes] by combustion, <u>explosion</u>, <u>deflagration</u> or <u>detonation</u> [that meets the definition of 1.4G fireworks or 1.3G fireworks as set forth herein]. Fireworks include toy pistols, toy cannons, toy canes or toy guns in which <u>explosives</u> are used; firecrackers, torpedoes, sky-rockets, Roman candles, sparklers or other devices of like construction; any device containing an <u>explosive</u> or flammable compound; and any tablet or other device containing an <u>explosive</u> substance. Fireworks do not include auto flares; paper caps containing an average of  $\frac{25}{100}$  of a grain of <u>explosive</u> 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  $\frac{8}{1000}$  of a gram of <u>explosive</u> compound and do not emit light or smoke when detonated.

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

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

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. When required by the *fire code official, high-piled combustible storage* also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet (1829 mm) in height.

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Any Group S occupancy exceeding 12,000 square feet (1115 m<sup>2</sup>) 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.

**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 firewatches are regularly conducted. (American Airlines Center, Gexa)

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 <u>allowing</u> [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[<del>.3</del>] and <u>approved</u> [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 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.

**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.

**<u>PYROTECHNIC OPERATOR.</u>** An individual approved to be responsible for pyrotechnics, pyrotechnic special effects materials, or both.

**REGISTRANT.** An individual who has been issued a certificate of registration for a commercial building under Section 115 of this code.
**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 <u>or portion of a building</u>, 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. <u>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.</u>

**STANDBY PERSONNEL.** Qualified fire service personnel, approved by the fire chief. When utilized, the number required shall be as directed by the fire chief. Charges for utilization shall be as normally calculated by the jurisdiction.

**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 the 2015 International Fire Code is amended to read as follows:

"**301.2 Permits.** Permits shall be [required as set forth] in <u>accordance with</u> Section 105.6 [for the activities or uses regulated by Sections 306, 307, 308 and 315]."

47. Paragraph 304.3.1, "Spontaneous Ignition," of Subsection 304.3, "Containers," of

Section 304, "Combustible Waste Material," of Chapter 3, "General Requirements" of the 2015

International Fire Code is amended to read as follows:

"**304.3.1 Spontaneous ignition.** Materials susceptible to spontaneous ignition, such as [<del>oily</del>] rags <u>containing flammable or combustible liquids and similar materials</u>, shall be stored in a *listed* disposal container. Contents of such containers shall be removed and disposed of daily."

48. Section 304, "Combustible Waste Material," of Chapter 3, "General

Requirements," of the 2015 International Fire Code is amended by adding a new Subsection

304.4, "Commercial Rubbish-Handling Operations," to read as follows:

**"304.4 Commercial rubbish-handling operations.** Occupancies exclusively performing commercial rubbish handling or recycling shall maintain rubbish or product to be processed or recycled as follows:

- 1. In *approved* vaults;
- 2. In covered metal or metal-lined receptacles or bins; or
- 3. Completely baled and stacked in an orderly manner in an *approved* location."

49. Subsection 306.1, "Motion Picture Projection Rooms," of Section 306, "Motion

Picture Projection Rooms and Film," of Chapter 3, "General Requirements," of the 2015

International Fire Code is amended by adding a new Paragraph 306.1.1, "Fire Extinguishers," to

read as follows:

"**306.1.1 Fire extinguishers.** Two approved fire extinguishers with a minimum 10-B:C rating shall be installed and maintained ready for use in projection rooms."

50. Subsection 306.1, "Motion Picture Projection Rooms," of Section 306, "Motion Picture Projection Rooms and Film," of Chapter 3, "General Requirements," of the 2015 International Fire Code is amended by adding a new Paragraph 306.1.2, "Smoking," to read as follows:

"**306.1.2 Smoking.** Smoking and other sources of ignition are prohibited within projection rooms in which cellulose nitrate film is allowed. Conspicuous NO SMOKING signs shall be posted in the room."

51. Paragraph 307.1.1, "Prohibited Open Burning," of Subsection 307.1, "General," of

Section 307, "Open Burning, Recreational Fires and Portable Outdoor Fireplaces," of Chapter 3,

"General Requirements," of the 2015 International Fire Code is amended to read as follows:

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

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

52. Subsection 307.2, "Permit Required," of Section 307, "Open Burning,

Recreational Fires and Portable Outdoor Fireplaces," of Chapter 3, "General Requirements," of

the 2015 International Fire Code is amended to read as follows:

"**307.2 Permit required.** A permit shall be obtained from the *fire code official* in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, <u>open burning, air curtain incinerator operations, pit burning, trench burning</u>, 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 <u>Texas Commission on Environmental</u> <u>Quality</u> [state or local air and water quality management authority], provided that all conditions specified in the authorization are followed.

<u>307.2.2 Time and atmospheric restrictions.</u> Open burning shall only be performed when time and atmospheric conditions comply with the limits set forth in the open burning permit. Air curtain incinerator, pit burning and trench burning operations are limited to hours specified by the Texas Commission on Environmental Quality."

53. Subsection 307.3, "Extinguishment Authority," of Section 307, "Open Burning,

Recreational Fires and Portable Outdoor Fireplaces," of Chapter 3, "General Requirements," of

the 2015 International Fire Code is amended to read as follows:

"307.3 Extinguishment authority. <u>The fire code official is authorized to order the</u> extinguishment by the permit holder, another person responsible or the fire department of open burning that creates or adds to a hazardous or objectionable situation. [When 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.]"

54. Subsection 307.4, "Location," of Section 307, "Open Burning, Recreational Fires

and Portable Outdoor Fireplaces," of Chapter 3, "General Requirements," of the 2015

International Fire Code is amended to read as follows:

"**307.4 Location.** The location for *open burning* shall not be less than  $\underline{300}$  [ $\underline{50}$ ] feet ( $\underline{91440}$  [ $\underline{45}240$ ] mm) from any structure, and provisions shall be made to prevent the fire from spreading to within  $\underline{300}$  [ $\underline{50}$ ] feet ( $\underline{91440}$  [ $\underline{15240}$ ] 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."
- 55. Paragraph 307.4.3, "Portable Outdoor Fireplaces," of Subsection 307.4,

"Location," of Section 307.4, of Section 307, "Open Burning, Recreational Fires and Portable

Outdoor Fireplaces," of Chapter 3, "General Requirements," of the 2015 International Fire Code

is amended to read as follows:

**"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 *dwellings*.
- 2. Where buildings, balconies, and decks are protected by an approved automatic sprinkler system."
- 56. Subsection 307.4, "Location," of Section 307, "Open Burning, Recreational Fires

and Portable Outdoor Fireplaces," of Chapter 3, "General Requirements," of the 2015 International Fire Code is amended by adding a new Paragraph 307.4.4, "Permanent Outdoor Firepit," to read as follows:

**"307.4.4 Permanent outdoor firepit.** Permanently installed outdoor firepits for recreational fire purposes shall not be installed within 10 feet of a structure or combustible material.

**Exception:** Permanently installed outdoor fireplaces constructed in accordance with the *Dallas Building Code.*"

57. Subsection 307.4, "Location," of Section 307, "Open Burning, Recreational Fires and Portable Outdoor Fireplaces," of Chapter 3, "General Requirements," of the 2015 International Fire Code is amended by adding a new Paragraph 307.4.5, "Trench Burns and Other Air Current Burns," to read as follows:

"**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."

58. Subsection 307.5, "Attendance," of Section 307, "Open Burning, Recreational Fires and Portable Outdoor Fireplaces," of Chapter 3, "General Requirements," of the 2015 International Fire Code is amended to read as follows:

"**307.5** Attendance. Open burning, <u>air curtain incinerators, pit burns, trench burns</u>, bonfires, Amend Chapter 16 (adopt 2015 International Fire Code) – Page 41

*recreational fires* and use of portable outdoor fireplaces shall be constantly attended, and an <u>attendant shall remain on site a minimum of 30 minutes after [until]</u> the fire is extinguished. A minimum of one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other *approved* on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate utilization."

59. Paragraph 308.1.4, "Open-Flame Cooking Devices," of Subsection 308.1,

"General," of Section 308, "Open Flames," of Chapter 3, "General Requirements," of the 2015

International Fire Code is amended to read as follows:

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

#### **Exceptions:**

- 1. One- and two-family dwellings, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity] with an aggregate LP-gas capacity not to exceed 100 lbs (5 containers).
- 2. Where buildings, balconies and decks are protected by an <u>approved</u> 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 <u>or heating</u> 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]."
  - 60. 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 the 2015 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."
- 61. 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 the 2015 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 untethered, <u>unmanned</u>, free-floating device containing an open flame or other heat source such as, <u>but not limited</u>, to a sky lantern."

62. Paragraph 308.3.1, "Open-Flame Decorative Devices," of Subsection 308.3,

"Open Flames," of Section 308, "Open Flames," of Chapter 3, "General Requirements," of the

2015 International Fire Code is retitled as Paragraph 308.3.1, "Candles and Other Open-Flame

Decorative Devices."

63. Paragraph 308.3.2, "Theatrical Performances," of Subsection 308.3, "Open Flames," of Section 308, "Open Flames," of Chapter 3, "General Requirements," of the 2015 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, as required by the fire code official."

64. Section 311, "Vacant Premises," of Chapter 3, "General Requirements," of the

2015 International Fire Code is retitled as Section 311, "Vacant and Partially Burned Premises."

#### 65. Subsection 311.1, "General," of Section 311, "Vacant and Partially Burned

Premises," of Chapter 3, "General Requirements," of the 2015 International Fire Code is amended to read as follows:

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

66. Paragraph 311.2.1, "Security," of Subsection 311.2, "Safeguarding Vacant

Premises," of Section 311, "Vacant and Partially Burned Premises," of Chapter 3, "General

Requirements," of the 2015 International Fire Code is amended to read as follows:

"**311.2.1 Security.** Exterior and interior openings accessible to other tenants or unauthorized persons shall be <u>maintained securely</u> boarded, locked, [blocked] or <u>barricaded [otherwise protected]</u> to prevent entry by unauthorized individuals <u>in</u> accordance with Section L102, 'Specifications for Securing Unsecured Vacant Structures,' of Appendix L. The *fire code official* is authorized to placard, post signs, erect barrier tape or take similar measures as necessary to secure public safety."

67. 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 the 2015 International Fire Code is amended to read as follows:

"**311.2.2 Fire protection**. Fire alarm, sprinkler and standpipe 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. <u>This exception does not apply to a building that must be registered under Chapter 48B, "Vacant Buildings," of the *Dallas City Code*.</u>
- 2. Where *approved* by the fire chief, buildings that will not be heated and where *fire protection systems* will be exposed to freezing temperatures, fire alarm and 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 has no contents or storage, and windows, doors and other

openings are secured to prohibit entry by unauthorized persons. <u>This exception</u> does not apply to a building that must be registered under Chapter 48B, "Vacant Buildings," of the *Dallas City Code.*"

68. Subsection 311.2, "Safeguarding Vacant Premises," of Section 311, "Vacant and

Partially Burned Premises," of Chapter 3, "General Requirements," of the 2015 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."

69. Subsection 311.2, "Safeguarding Vacant Premises," of Section 311, "Vacant and

Partially Burned Premises," of Chapter 3, "General Requirements," of the 2015 International

Fire Code is amended by adding a new Subsection 311.2.5, "Ninety-Day Notice to Repair

Partially Burned Building," to read as follows:

"311.2.5 Ninety-day notice to repair partially burned building. Persons owning or in charge of a vacant structure that has been 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 municipal court if they file a written request for a hearing with the municipal court within 30 days after the date of receiving notice of the *fire code official*'s decision."

70. Subsection 311.3, "Removal of Combustibles," of Section 311, "Vacant and

Partially Burned Premises," of Chapter 3, "General Requirements," of the 2015 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 <u>and/or burned or partially burned</u> <u>materials</u> 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 <u>Dallas</u> [International] Building Code, where waste is controlled and removed as required by Section 304.
- [2. Seasonally occupied buildings.]"
- 71. Subsection 311.5, "Placards," of Section 311, "Vacant and Partially Burned

Premises," of Chapter 3, "General Requirements," of the 2015 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 110 of this code relating to structural or interior hazards [shall be marked] as required by Sections 311.5.1 through 311.6. The *fire code official* shall immediately 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."

72. Subsection 314.2, "Fixtures and Displays," of Section 314, "Indoor Displays," of

Chapter 3, "General Requirements," of the 2015 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."

73. Subsection 314.4, "Vehicles," of Section 314, "Indoor Displays," of Chapter 3,

"General Requirements," of the 2015 International Fire Code is amended to read as follows:

"**314.4 Vehicles.** Liquid- or gas-fueled vehicles, boats or other motorcraft shall not be located indoors except as follows:

- 1. Batteries are disconnected.
- 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, 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*."
  - 74. Subsection 316.5, "Security Device," of Section 316, "Hazards to Fire Fighters,"

of Chapter 3, "General Requirements," of the 2015 International Fire Code is amended by adding

a new Paragraph 316.3.1, "Electrified Fences and Barriers," to read as follows:

"**316.5.1 Electrified fences and barriers.** The installation of electrified fences and barriers is prohibited after October 1, 2016.

**316.5.1.1 Existing electrified fences and barriers**. Electrified fences and barriers existing prior to October 1, 2016 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 <sup>1</sup>/<sub>2</sub> 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."
- 75. Chapter 3, "General Requirements," of the 2015 International Fire Code is

amended by adding a new Section 319, "Parade Floats," to read as follows:

#### "SECTION 319 PARADE FLOATS

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

**319.2 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."

76. Subsection 401.1, "Scope," of Section 401, "General," of Chapter 4, "Emergency

Planning and Preparedness," of the 2015 International Fire Code is amended to read as follows:

"401.1 Scope. Reporting of <u>fires and</u> 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.]"

77. Subsection 401.5, "Making False Report," of Section 401, "General," of Chapter

4, "Emergency Planning and Preparedness," of the 2015 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]."

78. Subsection 403.1, "General," of Section 403, "Emergency Preparedness Requirements," of Chapter 4, "Emergency Planning and Preparedness," of the 2015 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."

79. 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 the 2015 International Fire Code is amended to read

as follows:

"403.2.3 <u>Standby</u> [Fire watch] personnel. <u>Standby</u> [Fire watch] personnel shall be provided where required by Section 403.12.1."

80. Subsection 403.5, "Group E Occupancies," of Section 403, "Emergency

Preparedness Requirements," of Chapter 4, "Emergency Planning and Preparedness," of the

2015 International Fire Code is amended to read as follows:

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

81. Subparagraph 403.10.1.1, "Evacuation Diagrams," of Paragraph 403.10.1, "Group

R-1 Occupancies," of Subsection 403.10, "Group R Occupancies," of Section 403, "Emergency

Preparedness Requirements," of Chapter 4, "Emergency Planning and Preparedness," of the

2015 International Fire Code is amended to read as follows:

"403.10.1.1 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. <u>A description of the fire alarm system and an explanation of its operation (including the meaning of signals).</u>
- 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.
- <u>4.</u> <u>A warning not to use elevators in case of fire.</u>
- 5. General instructions as to self-protective measures a person should take if trapped in a room by fire or smoke."
- 82. Paragraph 403.11.2, "High-Rise Building," of Subsection 403.11, "Special Uses,"

of Section 403, "Emergency Preparedness Requirements," of Chapter 4, of the 2015

International Fire Code is amended to read as follows:

"**403.11.2 High-rise buildings.** An *approved* fire safety and evacuation plan in accordance with Sections 404 and N103 of Appendix N shall be prepared, submitted, and maintained for high-rise buildings."

83. Paragraph 403.12.1, "Fire Watch Personnel," of Subsection 403.12, "Special

Requirements of Public Safety," of Section 403, "Emergency Preparedness Requirements," of

Chapter 4, "Emergency Planning and Preparedness," of the 2015 International Fire Code is

amended to read as follows:

"403.12.1 <u>Standby</u> [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, <u>failure of life safety systems</u>, or the nature of the performance, exhibition, display, contest or activity, the *owner*, agent or lessee shall provide one or more <u>standby</u> [fire watch] personnel, as required and *approved*. <u>Standby</u> [Fire watch] personnel shall comply with Sections 403.12.1.1 and 403.12.1.2.

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

**403.12.1.2 Duties.** On-duty <u>standby</u> [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."

84. Paragraph 403.12.3, "Crowd Managers for Gatherings Exceeding 1,000 People,"

of Subsection 403.12, "Special Requirements for Public Safety," of Section 403, "Emergency

Preparedness Requirements," of Chapter 4, "Emergency Planning and Preparedness," of the

2015 International Fire Code is amended to read as follows:

"403.12.3 Crowd managers for gatherings exceeding <u>250</u> [1,000] people. Where facilities or events involve a gathering of more than <u>250</u> [1,000] people, crowd managers shall be provided in accordance with Sections 403.12.3.1 through 403.12.3.3.

**403.12.3.1 Number of crowd managers.** The minimum number of crowd managers shall be established at a ratio of one crowd manager for every 250 persons.

**Exception:** Where approved by the *fire code official*, the number of crowd managers shall be permitted to be reduced where the facility is equipped throughout with an *approved automatic sprinkler system* or based upon the nature of the event <u>and the fire protection provided</u>.

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

**403.12.3.3 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 idneifiy and mitigate any fire hazards.
- 3. Verify compliance 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 as specified in the fire safety plan."

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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 the 2015 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 405.2, "Fire and Evacuation Drill Frequency and Participation," of

Subsection 405.2, "Frequency," of Section 405, "Emergency Evacuation Drills," of Chapter 4,

"Emergency Planning and Preparedness," of the 2015 International Fire Code is amended to read as follows:

#### **"TABLE 405.2**

#### FIRE AND EVACUATION DRILL

GROUP OR OCCUPANCY		FREQUENCY	PARTICIPATION
Group A		Quarterly	Employees
Group B <sup>b</sup>		Annually	Employees [All occupants]
Group B <sup>b, c</sup> (Ambulatory care facilities)		Annually	Employees
Group (Clinic, outpatient)	$B^{t}$	Annually	Employees
Group E		Monthly <sup>a</sup>	All occupants
Group F		Quarterly [Annually]	Employees

#### FREQUENCY AND PARTICIPATION

Group I-1	Semiannually on each shift	All occupants
Group I-2	Quarterly on each shift <sup>a</sup>	Employees
Group I-3	Quarterly on each shift <sup>a</sup>	Employees
Group I-4	Monthly on each shift <sup>a</sup>	Employees [All occupants]
Group R-1	Quarterly on each shift	Employees
Group R-2 <sup>d</sup>	Four annually	All occupants
Group R-4	Semiannually on each shift <sup>a</sup>	All occupants
High-rise buildings	Annually	All occupants

a. In severe climates, the *fire code official* shall have the authority to modify the emergency evacuation drill frequency.

b. 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*.

c. Emergency evacuation drills are required in ambulatory care facilities in accordance with Section 403.3.

d. Emergency evacuation drills in Group R-2 college and university buildings shall be in accordance with Section 403.10.2.1. Other Group R-2 occupancies shall be in accordance with Section 403.10.2.2."

87. Subsection 405.4, "Time," of Section 405, "Emergency Evacuation Drills," of

Chapter 4, "Emergency Planning and Preparedness," of the 2015 International Fire Code is

amended to read as follows:

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

88. Subsection 501.3, "Construction Documents," of Section 501, "General," of

Chapter 5, "Fire Service Features," of the 2015 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 L104, 'Limited Access Gates' of Appendix L) shall be submitted to the fire department for review and approval prior to construction or installation.

**501.3.1 Plan review fees.** Plans for fire apparatus access roads (in accordance with Section 503 and Appendix D) shall be submitted with a nonrefundable \$200 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.

Plans for limited access gates that obstruct fire apparatus access roads (in accordance with Section L104, 'Limited Access Gates' of Appendix L) shall be accompanied by a nonrefundable \$200 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 the 2015 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 the 2015 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 by an *approved* route. 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 chief. Refer to Section 912 for additional requirements for access to fire department connections and Section 504.1 for 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 an increase in the minimum access widths <u>and vertical clearances</u> where they are inadequate for fire or rescue operations or where necessary to meet 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 81,500 pounds (36,968 kg) and shall be <u>of concrete or asphalt</u> [surfaced] so as to provide all-weather driving capabilities. <u>All other driving surfaces shall receive written approval by the fire chief prior to installation.</u>

**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 <u>in</u> 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 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 which are not designed for such use, *approved* barriers, *approved* signs or both shall be installed and maintained when required by the *fire code official*.

**503.2.7 Grade.** The <u>maximum vertical</u> grade <u>for all</u> [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.** <u>Approved striping, or when allowed</u> [Where required] by the *fire code official*, [approved] signs, or <u>both</u> [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.

- 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 chief. 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 chief.

**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, 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 three inches or less in height.

503.4.2 Noncompliance. Any unauthorized vehicle in a 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
- 3. 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 Required gates or barricades.** The *fire code official* is authorized to require the installation and maintenance of gates or other *approved* barricades across fire apparatus access roads, trails or other accessways, not including public streets, alleys or highways. Electric gate operators, where provided, shall be *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.

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** <u>Limited access</u> [Security] gates. The installation of <u>limited access</u> [security] gates across a fire apparatus access road shall be *approved* by the fire chief. Where <u>limited access</u> [security] gates are installed, they shall have an *approved* means of emergency operation <u>in accordance</u> with Section N104, 'Limited Access Gates,' of Appendix N. The <u>limited access</u> [security] gates and the emergency operation shall be maintained operational at all times <u>in accordance with</u> Section N104, 'Limited Access Gates,' of Appendix N." Electric gate operators, where provided, shall be *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 the 2015 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 the 2015 International Fire Code is

amended to read as follows:

**505.1** Address identification. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of <u>6 inches (152.4 mm)</u> [4 inches (101.6 mm)] high with a minimum stroke width of 0.5 inch (12.7 mm). Where access is by means of a private road, buildings do not immediately front a street, and/or the building cannot be viewed from the public way, a monument, pole or other sign with approved 6 inch (152.4 mm) height building numerals or addresses and 4 inch (101.6 mm) height suite/apartment numerals of a color contrasting with the background of the building or other approved means shall be used to identify the structure. Numerals or addresses shall be posted on a minimum 20 inch (508 mm) by 30 inch (762 mm) background with a border. Address numbers shall be maintained.

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

<u>3 <sup>1</sup>/2</u> 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."

93. Section 506, "Key Boxes," of Chapter 5, "Fire Service Features," of the 2015

International Fire Code is amended to read as follows:

#### "SECTION 506 KEY BOXES

**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 in the following buildings:

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

**Exception:** All non-required (owner option) exterior key boxes shall be recess mounted and installed per Section 506.4. The *fire code official* may allow installation of an *approved* key switch in lieu of an exterior key box.

**506.1.1 Locks.** An *approved* lock shall be installed on gates or similar barriers when required by the *fire code official*.

**506.1.2 Key boxes for nonstandardized fire service elevator keys.** Key boxes provided for nonstandardized fire service elevator keys shall comply with Section 506.1 and all of the following:

- 1. The key box shall be compatible with an existing rapid entry key box system in use in the jurisdiction and *approved* by the *fire code official*.
- 2. The front cover shall be permanently labeled with the words "Fire Department Use

Only Elevator Keys."

- 3. The key box shall be mounted at each elevator bank at the lobby nearest to the lowest level of fire department access.
- 4. The key box shall be mounted 5 feet 6 inches (1676 mm) above the finished floor to the right side of the elevator bank.
- 5. Contents of the key box are limited to fire service elevator keys. Additional elevator access tools, keys and information pertinent to emergency planning or elevator access shall be permitted when authorized by the *fire code official*.
- 6. In buildings with two or more elevator banks, a single key box shall be permitted to be used when such elevator banks are separated by not more than 30 feet (9144 mm). Additional key boxes shall be provided for each individual elevator or elevator bank separated by more than 30 feet (9144 mm).

**Exception:** A single key box shall be permitted to be located adjacent to a *fire command center* or the nonstandard fire service elevator key shall be permitted to be secured in a key box used for other purposes and located in accordance with Section 506.1.

**506.2 Key box maintenance.** The operator of the building shall immediately notify the *fire code official* and provide the new key when a lock is changed or rekeyed. The key to such lock shall be secured in the key box.

**506.3 Installation.** 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.

Exception: An approved key switch may be used in lieu of an exterior key box.

**506.4 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. <u>Elevator keys capable of accessing all floors in the building.</u>
  - 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.

**506.5 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.

506.6.1 Keys. Each key set and key shall be identified as to its specific usage."

94. Subsection 507.2, "Type of Water Supply," of Section 507, "Fire Protection

Water Supplies," of Chapter 5, "Fire Service Features," of the 2015 International Fire Code is

amended to read as follows:

**"507.2 Type of water supply.** A water supply shall consist of <u>city water mains</u>. The *fire code* <u>official may approve alternate forms of water supply such as</u> reservoirs, pressure tanks, elevated tanks, [water mains] or other fixed systems capable of providing the required fire flow.

**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 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 with NFPA 22."

95. Subsection 507.3, "Fire Flow," of Section 507, "Fire Protection Water Supplies,"

of Chapter 5, "Fire Service Features," of the 2015 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 <u>in accordance with Appendix B</u>, "Fire-Flow Requirements for Buildings." [determined by an *approved* method.]"

96. Subsection 507.4, "Water Supply Test," of Section 507, "Fire Protection Water

Supplies," of Chapter 5, "Fire Service Features," of the 2015 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. [ $\Theta r$ ] <u>A[ $\Theta$ ]</u>Approved documentation of the test shall be provided to the *fire code official* prior to final approval of the water supply system."

97. Subsection 507.5, "Fire Hydrant Systems," of Section 507, "Fire Protection Water

Supplies," of Chapter 5, "Fire Service Features," of the 2015 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."

98. Paragraph 507.5.1, "Where Required," of Subsection 507.5, "Fire Hydrant

Systems," of Section 507, "Fire Protection Water Supplies," of Chapter 5, "Fire Service

Features," of the 2015 International Fire Code is amended to read as follows:

"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

#### <u>(46.45 m<sup>2</sup>).</u>

**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  $\underline{400}$  [ $\underline{100}$ ] feet (<u>122 m</u>) [(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."

99. Paragraph 507.5.4, "Obstruction," of Subsection 507.5, "Fire Hydrant Systems,"

of Section 507, "Fire Protection Water Supplies," of Chapter 5, "Fire Service Features," of the

2015 International Fire Code is amended to read as follows:

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

100. Subsection 507.5, "Fire Hydrant Systems," of Section 507, "Fire Protection

Water Supplies," of Chapter 5, "Fire Service Features," of the 2015 International Fire Code is

amended by adding a new Paragraph 507.5.7, "Hydrant Color Coding," to read as follows:

"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 silver. Private hydrant barrels shall be kelly green."
- 101. Subsection 507.5, "Fire Hydrant Systems," of Section 507, "Fire Protection

Water Supplies," of Chapter 5, "Fire Service Features," of the 2015 International Fire Code is

amended by adding a new Paragraph 507.5.8, "Location," to read as follows:

"507.5.8 Location. Fire hydrants shall be located a minimum of  $2\frac{1}{2}$  feet (762 mm) and a maximum of  $7\frac{1}{2}$  feet (2286 mm) from the edge of fire apparatus access roads."

102. Section 508, "Fire Command Center," of Chapter 5, "Fire Service Features,"

of the 2015 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 <u>Dallas</u> [International] Building Code, a fire command center for fire department operations shall be provided and shall comply with Sections 508.1.1 through 508.1.6.

**508.1.1 Location and access.** The location and accessibility of the *fire command center* shall be *approved* by the fire chief.

**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 <u>Dallas</u> [International] Building Code or horizontal assembly constructed in accordance with Section 711 of the <u>Dallas</u> [International] Building Code, or both.

**508.1.3 Size**. The fire command center shall be a minimum of 200 square feet  $(19 \text{ m}^2)$  in area with a minimum dimension of 10 feet (3048 mm).

**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 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 <u>if mechanical air-handling</u> <u>equipment is used for smoke removal purposes in accordance with Section 403.4.7 of</u> 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 *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-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 contains, 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 (i.e., day, night, weekend);
  - 13.2. Building emergency contact information that includes: a list of the building's emergency contacts (e.g., building manager, building engineer, etc.) 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 (e.g., floors, walls, columns, and roof assembly);
  - 13.4. *Exit* stair information that includes: number of *exit stairs* in the building, each *exit stair* designation and floors served, location where each *exit stair* discharges, *exit stairs* that are pressurized, *exit stairs* provided with emergency lighting, each *exit stair* that allows reentry, *exit stairs* 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, location of sky lobby, 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, 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, location of different types of *automatic sprinkler systems* installed (e.g., dry, wet, pre-action, etc.); and
- 13.7. Hazardous material information that includes: location of hazardous material, 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.
- 18. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided."
- 103. Subsection 509.1, "Identification," of Section 509, "Fire Protection and Utility

Equipment Identification and Access," of Chapter 5, "Fire Service Features," of the 2015

International Fire Code is amended by adding Paragraph 509.1.2 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. Section 510, "Emergency Responder Radio Coverage," of Chapter 5, "Fire

Service Features," of the 2015 International Fire Code is deleted.

105. Subparagraph 603.3.2.1, "Quantity Limits," or Paragraph 603.3.2, "Fuel Oil

Storage Inside Buildings," of Subsection 603.3, "Fuel Oil Storage Systems," of Section 603,

"Fuel-Fired Appliances," of Chapter 6, "Building Services and Systems," of the 2015

International Fire Code is amended to read as follows:

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

**Exception:** The aggregate capacity limit shall be permitted to be increased to 3,000 gallons (11 356 L) <u>in accordance with all requirements of Chapter 57.</u> [of Class II or III liquid for storage in protected above ground 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; and
- 3. The tanks shall be located in a room protected by an *automatic sprinkler system* complying with Section 903.3.1.1.]"
- 106. Subsection 604.1, "General," of Section 604, "Emergency and Standby Power

Systems," of Chapter 6, "Building Services and Systems," of the 2015 International Fire Code is

amended as follows:

"**604.1 General.** Emergency power systems and standby power systems required by this code or the *Dallas* [*International*] *Building Code* shall comply with Sections 604.1.1 through 604.1.10[8]."

107. Paragraph 604.1.2, "Installation," of Subsection 604.1, "General," of Section 604,

"Emergency and Standby Power Systems," of Chapter 6, "Building Services and Systems", of

the 2015 International Fire Code is amended as follows:

"604.1.2 Installation. Emergency power systems and standby power systems shall be installed in accordance with the <u>Dallas</u> [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."

108. Subsection 604.1, "General," of Section 604, "Emergency and Standby Power

Systems" of Chapter 6, "Building Services and Systems", of the 2015 International Fire Code is

amended by adding a new Paragraph 604.1.9, "Energy Time Duration," to read as follows:

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

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

109. Subsection 604.1, "General," of Section 604, "Emergency and Standby Power

Systems" of Chapter 6, "Building Services and Systems", of the 2015 International Fire Code is

amended by adding a new Paragraph 604.1.10, "Critical Operations Power Systems (COPS)," to

read as follows:

"604.1.10 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."

110. Subsection 604.2, "Where Required," of Section 604, "Emergency and Standby

Power Systems," of Chapter 6, "Building Services and Systems," of the 2015 International Fire

Code is amended as follows:

"604.2 Where required. Emergency and standby power systems shall be provided where required by Sections 604.2.1 through <u>604.2.24 or elsewhere identified in this code or any other referenced code</u> [604.2.18.4]."

111. Paragraph 604.2.3, "Emergency Responder Radio Coverage Systems," of Subsection 604.2, "Where Required," of Section 604, "Emergency and Standby Power Systems" of Chapter 6, "Building Services and Systems", of the 2015 International Fire Code is amended as follows:

"604.2.3 <u>Reserved</u>. [Emergency responder radio coverage systems. Standby power shall be provided for emergency responder radio coverage systems as required in Section 510.4.2.3. The standby power supply shall be capable of operating the emergency responder radio coverage system for a duration of not less than 24 hours.]"

112. Paragraph 604.2.4, "Emergency Voice/Alarm Communications Systems," of Subsection 604.2, "Where Required," of Section 604, "Emergency and Standby Power Systems," of Chapter 6, "Building Services and Systems," of the 2015 International Fire Code is amended

as follows:

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

1. Covered and open malls, Section 604.2.17.

2. Group A occupancies, Sections 907.2.1.1 and 907.5.2.2.4.

3. Special amusement buildings, Section 907.2.12.3.

4. High rise buildings, Section 907.2.13.

5. Atriums, Section 907.2.14.

6. Deep underground buildings, Section 907.2.19."

113. Paragraph 604.2.12, "Means of Egress Illumination," of Subsection 604.2, "Where

Required," of Section 604, "Emergency and Standby Power Systems" of Chapter 6, "Building

Services and Systems", of the 2015 International Fire Code is amended as follows:

"604.2.12 Means of egress illumination. Emergency power shall be provided for *means of* egress illumination in accordance with Section 1008.3 and 1104.5.1 for a minimum of 90 minutes."

114. Paragraph 604.2.13, "Membrane Structures," of Subsection 604.2, "Where

Required," of Section 604, "Emergency and Standby Power Systems" of Chapter 6, "Building

Services and Systems", of the 2015 International Fire Code is amended as follows:

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

115. Paragraph 604.2.15, "Smoke Control Systems," of Subsection 604.2, "Where

Required," of Section 604, "Emergency and Standby Power Systems" of Chapter 6, "Building

Services and Systems", of the 2015 International Fire Code is amended as follows:

**"604.2.15 Smoke control systems.** Standby power shall be provided for smoke control systems in the following occupancies, or as specified elsewhere in this code, in accordance with Section 909.11:

- 1. Covered mall building, Dallas Building Code, Section 404.5.
- 2. Atriums, Dallas Building Code, Section 404.7.
- 3. Underground buildings, Dallas Building Code, Section 405.5.
- 4. Group I-3, Dallas Building Code, Section 408.9.
- 5. Stages, Dallas Building Code, Section 410.3.7.2.
- 6. Special amusement buildings (as applicable to Group A's), *Dallas Building* <u>Code</u>, Section 411.1.
- 7. Smoke protected seating, Section 1028.6.2.1."
- 115. Subsection 604.2, "Where Required," of Section 604, "Emergency and Standby

Power Systems," of Chapter 6, "Building Services and Systems", of the 2015 International Fire

Code is amended by adding new Paragraphs 604.2.17 through 604.2.24 as follows:

"604.2.17 Covered and open mall buildings. Emergency power shall be provided in accordance with Section 907.2.20 and 914.2.3.

**604.2.18** Airport traffic control towers. A standby power system shall be provided in airport traffic control towers more than 65 feet (19 812 mm) 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.

**604.2.19** Smokeproof enclosures and stair pressurization alternative. Standby power shall be provided for smokeproof enclosures, stair pressurization alternative and associated automatic fire detection systems as required by the *Dallas Building Code*, Section 909.20.6.2.

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

**604.2.21 Elimination of smoke dampers in shaft penetrations.** Standby power shall be provided when eliminating the smoke dampers in ducts penetrating shafts in accordance with the *Dallas Building Code*, Section 717.5.3, exception 2.3.

**604.2.22** Common exhaust systems for clothes dryers. Standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures in accordance with the *Dallas Mechanical Code* Section 504.8, item 7.

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

**604.2.24 Means of egress illumination in existing buildings.** Emergency power shall be provided for *means of egress* illumination in accordance with Section 1104.5 and 1104.5.1 when required by the fire code official. (90 minutes in I-2, 60 minutes elsewhere.)"

116. Subsection 605.10, "Portable, Electric Space Heaters," of Section 605, "Electrical

Equipment, Wiring and Hazards," of Chapter 6, "Building Services and Systems," of the 2015

International Fire Code is amended to read as follows:

"605.10 Portable, electric space heaters. Where not prohibited by other sections of this code, portable, electric space heaters shall be permitted to be used in all occupancies other than Group I-2 and in accordance with Sections 605.10.1 through 605.10.4. Owners of the portable, electric space heaters and/or the person in control of the portable, electric space heaters shall be responsible for compliance.

**Exception:** The use of portable, electric space heaters in which the heating element cannot exceed a temperature of 212°F (100°C) shall be permitted in nonsleeping staff and employee areas in Group I-2 occupancies."

117. Subsection 607.3, "Emergency Signs," of Section 607, "Elevator Operation,

Maintenance and Fire Service Keys," of Chapter 6, "Building Services and Systems," of the

2015 International Fire Code is amended to read as follows:

"[BE] 607.3 Emergency signs. An *approved* pictorial sign of a standardized design shall be posted adjacent to each elevator call station on all floors instructing occupants to use the exit stairways and not to use the elevators in case of fire. The sign shall read: 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.

#### **Exceptions:**
- 1. The emergency sign shall not be required for elevators that are part of an accessible *means of egress* complying with Section 1007.4.
- 2. The emergency sign shall not be required for elevators that are used for occupant selfevacuation in accordance with Section 3008 of the <u>Dallas</u> [International] Building Code."
- 118. Paragraph 607.8.2, "Access to Standardized Fire Service Keys," of Subsection

607.8, "Standardized Fire Service Elevator Keys," of Section 607, "Elevator Operation,

Maintenance and Fire Service Keys," of Chapter 6, "Building Services and Systems," of the

2015 International Fire Code is amended to read as follows:

"607.8.2 Access to standardized fire service keys. Access to standardized fire service elevator keys shall be restricted to the following:

- 1. [Elevator owners or their authorized agents.
- 2. Elevator contractors.
- 3. Elevator inspectors of the jurisdiction.
- 4.] *Fire code officials* of the jurisdiction.
- <u>2.</u> [5.] The fire department and other emergency response agencies designated by the *fire code official*."
- 119. Section 607, "Elevator Operation, Maintenance and Fire Service Keys," of

Chapter 6, "Building Services and Systems," of the 2015 International Fire Code is amended by

adding a new Subsection 607.9, "Inspections," to read as follows:

"607.9 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."

120. Subsection 609.1, "General," of Section 609, "Commercial Kitchen Hoods," of

Chapter 6, "Building Services and Systems," of the 2015 International Fire Code is amended to

read as follows:

"609.1 General. Commercial kitchen exhaust hoods shall comply with the requirements of the <u>Dallas</u> [International] Mechanical Code. <u>Residential kitchen hood exhaust hoods shall comply</u> with Sections 609.3.3.1 and 609.3.3.2."

121. Subsection 704.1, "Enclosure," of Section 704, "Floor Openings and Shafts," of

Chapter 7, "Fire and Smoke Protection Features," of the 2015 International Fire Code is

amended to read as follows:

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

122. Subsection 807.3, "Combustible Decorative Materials," of Section 807, "Decorative

Materials Other Than Decorative Vegetation in New and Existing Buildings," of Chapter 8,

"Interior Finish, Decorative Materials and Furnishings," of the 2015 International Fire Code is

amended to read as follows:

"807.3 Combustible decorative materials. In occupancies in Groups A, E, I, and R-1, and dormitories in Group R-2 [In other than Group I 3], curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall comply with Section 807.4 and shall not exceed 10 percent of the specific wall or ceiling area to which they are attached.

Fixed or moveable walls and partitions, paneling, wall pads and crash pads applied structurally or for decoration, acoustical correction, surface insulation or other purposes shall be considered *interior finish*, shall comply with Section 503 and shall not be *considered decorative materials* or furnishings.

#### **Exceptions:**

1. In auditoriums in Group A, the permissible amount of curtains, draperies, fabric hangings and other similar combustible decorative material suspended from walls or ceilings shall not exceed 75 percent of the aggregate wall area where the building is equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, and where the material is installed in accordance with Section 803.11 of the <u>Dallas</u> [International] Building Code.

2. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings and other similar combustible decorative material

suspended from walls or ceilings shall not exceed 50 percent of the aggregate wall areas where the building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.

3. In Group B and M occupancies, the amount of combustible fabric partitions suspended from the ceiling and not supported by the floor shall comply with Section 807.4 and shall not be limited."

123. 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

Other Than Decorative Vegetation in New and Existing Buildings," of Chapter 8, "Interior

Finish, Decorative Materials and Furnishings," of the 2015 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."

124. 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 Other Than Decorative Vegetation in New and Existing Buildings," of Chapter 8, "Interior Finish, Decorative Materials and Furnishings," of the 2015 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. <u>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. Such materials shall not be continuous from floor to ceiling or wall to wall."</u>

125. 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 Other Than Decorative Vegetation in New and Existing Buildings," of Chapter 8, "Interior Finish, Decorative Materials and Furnishings," of the 2015 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."

126. 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 Other Than Decorative Vegetation in New and Existing Buildings," of Chapter 8,

"Interior Finish, Decorative Materials and Furnishings," of the 2015 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. <u>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."</u>

127. Paragraph 901.2.1, "Statement of Compliance," of Subsection 901.2

"Construction Documents," of Section 901, "General," of Chapter 9, "Fire Protection Systems,"

of the 2015 International Fire Code is amended to read as follows:

"901.2.1 Statement of compliance. Before requesting final approval of the installation [where required by the *fire code official*], the installing contractor shall furnish a written statement to the *fire code official* that the subject *fire protection system* or partial system has been installed in accordance with *approved* plans and has been tested in accordance with the

manufacturer's specifications and the appropriate installation standard. Any deviations from the design standards shall be noted and copies of the approvals for such deviations shall be attached to the written statement."

128. Subsection 901.3, "Permits," of Section 901, "General," of Chapter 9, "Fire

Protection Systems," of the 2015 International Fire Code is amended to read as follows:

"901.3 Permits. Permits shall be required as set forth in Section 105.6 and 105.7.

**901.3.1 Plans.** Complete plans and specifications for fire alarm systems; fire-extinguishing systems, including automatic sprinklers and wet and dry standpipes; halon systems and other special types of automatic fire-extinguishing systems; basement pipe inlets; and other *fire protection systems* and appurtenances thereto shall be submitted to the fire protection engineers of the building inspection division for review and approval prior to system installation. Plans and specifications for fire alarm systems shall include, but not be limited to, a floor plan; location of all alarm-initiating and alarm-signaling devices; alarm control-and trouble-signaling equipment; annunciation; power connection; battery calculations; conductor type and sizes; voltage drop calculations; and manufacturer, model numbers and listing information for all equipment, devices and materials. All submitted plans shall also meet the requirements as specified by the adopted NFPA standards and this code. The provisions of this Code shall govern in the event of conflicts and /or differences between this chapter and the NFPA standards.

**<u>901.3.2 Plan review fees.</u>** Plan review fees for fire alarm systems shall be in accordance with the *Dallas Building Code.*"

129. Paragraph 901.4.1, "Required Fire Protection Systems," of Subsection 901.4,

"Installation," of Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2015

International Fire Code is amended to read as follows:

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

130. Paragraph 901.4.2, "Nonrequired Fire Protection Systems," of Subsection 901.4,

"Installation," of Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2015

International Fire Code is amended to read as follows:

**"901.4.2 Nonrequired fire protection systems.** A fire protection system [or portion thereof] not required by this code or the <u>Dallas</u> [International] Building Code shall be allowed to be furnished for [partial or complete] protection provided such installed system meets the requirements of this code and the <u>Dallas</u> [International] Building Code."

131. Paragraph 901.4.3, "Fire Areas," of Subsection 901.4, "Installation," of Section

901, "General," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is

amended to read as follows:

"901.4.3 Fire areas. Where buildings, or portions thereof, are divided into *fire areas* so as not to exceed the limits <u>and/or occupant load</u> 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 <u>Dallas</u> [*International*] Building Code or *horizontal assemblies* constructed in accordance with Section 711 of the <u>Dallas</u> [*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 <u>Dallas</u> [*International*] Building Code."

132. Paragraph 901.4.6, "Pump and Riser Room Size," of Subsection 901.4,

"Installation," of Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2015

International Fire Code is amended to read as follows:

"901.4.6 Pump and riser room size. Fire pump and *automatic sprinkler system* riser rooms shall be designed with adequate space for all equipment necessary for the installation, as defined by the manufacturer, with sufficient working space around the stationary equipment. Clearances around equipment to elements of permanent construction, including other installed equipment and appliances, shall be <u>not less than 36</u>" (762mm) in width, 36" (762mm) in depth and 78" (1981mm) in height [sufficient] to allow inspection, service, repair or replacement without removing such elements or permanent construction or disabling the function of a required fire-resistance-rated assembly. Fire pump and *automatic sprinkler system* riser rooms shall be provided with a door(s) and an unobstructed passageway large enough to allow removal of the largest piece of equipment."

133. Subsection 901.5, "Installation Acceptance Testing," of Section 901, "General," of

Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is amended to read as

follows:

"901.5 Installation acceptance testing. Fire detection and alarm systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains and all other *fire protection 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 <u>witness</u> [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 \$622.00."

134. Subsection 901.6, "Inspection, Testing and Maintenance," of Section 901,

"General," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is

amended to read as follows:

**"901.6 Inspection, testing and maintenance.** Fire detection, alarm and extinguishing systems, mechanical smoke exhaust systems, and smoke and heat vents shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Nonrequired *fire protection systems* and equipment shall be inspected, tested and maintained or removed <u>with written approval of the fire code official.</u>"

135. Paragraph 901.6.1, "Standards," of Subsection 901.6, "Inspection, testing and

maintenance," of Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2015

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 night time freezing conditions.
- 9. Contact the *fire code official* for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the *fire code official*."

136. Subsection 901.6, "Inspection, Testing and Maintenance," of Section 901,

"General," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is

amended by adding Paragraph 901.6.3, "False Alarms and Nuisance Alarms," to read as follows:

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

137. Subsection 901.7, "Systems Out of Service," of Section 901, "General," of

Chapter 9, "Fire Protection Systems," of the 2015 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, <u>or in</u> 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 either be evacuated or <u>standby personnel</u> [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.

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Where utilized, <u>standby personnel</u> [fire watches] shall be provided with at least 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."

138. Paragraph 901.7.6, "Restoring Systems to Service," of Subsection 901.7,

"Systems Out of Service," of Section 901, "General," of Chapter 9, "Fire Protection Systems," of

the 2015 International Fire Code is amended to read as follows:

"901.7.6 Restoring systems to service. When 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* <u>official</u>, 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. <u>All</u> [The] impairment tags have [has] been removed."
- 139. Paragraph 901.8.2, "Removal of Existing Occupant-Use Hose Lines," of

Subsection 901.8, "Removal of or Tampering with Equipment," of Section 901, "General," of

Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is amended to read as

follows:

**"901.8.2 Removal of existing occupant-use hose lines.** The *fire code official* is authorized to permit the removal of existing occupant-use hose lines <u>and hose valves</u> where all of the following conditions exist:

1. [Installation is not required by this code or the International Building Code.

2.] The hose line( $\underline{s}$ ) would not be utilized by trained personnel or the fire department.

<u>2[3]</u>. If t[T]he [remaining outlets] occupant-use hose lines are removed, but the hose valves are required to remain as per the fire code official, such shall be [are] compatible with local fire department fittings."

140. Subsection 901.9, "Termination of Monitoring Service," of Section 901,

"General," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is

amended to read as follows

"<u>901.9 Discontinuation or change of</u> [Termination of monitoring] service. [For fire alarm systems required to be monitored by this code, n]Notice shall be made to the *fire code official* whenever <u>contracted</u> alarm [monitoring] services for monitoring of any fire alarm system are terminated for any reason, or a change in alarm monitoring provider occurs. Notice shall be made in writing to the *fire code official* by the [monitoring service provider] building owner or alarm service provider prior to the service being terminated."

141. Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2015

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."

142. Subsection 903.2, "Where Required," of Section 903, "Automatic Sprinkler

Systems," of Chapter 9, "Fire Protection Systems," of the 2015 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 fire barriers consisting of not less than 1 hour fire barrier 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.]"

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143. Subparagraph 903.2.8.1, "Group R-3," of Paragraph 903.2.8, "Group R," of

Subsection 903.2, "Where Required," of Section 903, "Automatic Sprinkler Systems," of

Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is amended by adding

new Paragraphs 903.2.8.1.1 and 903.2.8.1.2, "Group R-3," to read as follows:

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

<u>903.2.8.1.1.1 Additional required suppression systems</u>. An approved automatic sprinkler system shall be installed throughout dwellings in which the total unsprinklered building area exceeds 7,500 square feet ( $697 \text{ m}^2$ ).

### **Exceptions:**

- 1. Dwellings that are separated into fire areas no greater than 7,500 square feet (697  $m^2$ ) 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 m<sup>2</sup>) and not housing a Group H occupancy may be increased by not more than 1,000 square feet (93 m<sup>2</sup>). Not more than one increase in floor area shall be permitted under this exception.

<u>903.2.8.1.2 Draftstop requirements.</u> Draftstopping shall be installed in attics and concealed roof spaces, such that any horizontal area does not exceed 3,000 square feet  $(278.7 \text{ m}^2)$ .

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

144. Paragraph 903.2.9, "Group S-1," of Subsection 903.2, "Where Required," of

Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the

2015 International Fire Code is amended by adding a new Subparagraph 903.2.9.3, "Self-Service

Storage Facility," to read as follows:

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

145. Subparagraph 903.2.11.3, "Buildings 55 Feet or More in Height," of Paragraph 903.2.11, "Specific Buildings Areas and Hazards," of Subsection 903.2, "Where Required," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is amended to read as follows:

**"903.2.11.3 Buildings 55 feet or more in height.** An automatic sprinkler system shall be installed throughout buildings that have one or more stories with an occupant load of 30 or more, other than penthouses in compliance with Section 1510 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[s]:

[4.] Open parking structures in compliance with Section 406.5 of the *Dallas Building Code*, having no other occupancies above the subject garage.

[2. Occupancies in Group F-2.]"

146. Paragraph 903.2.11, "Specific Buildings Areas and Hazards," of Subsection

903.2, "Where Required," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire

Protection Systems," of the 2015 International Fire Code is amended by adding a new

Subparagraph 903.2.11.7, "High-Piled Combustible Storage," to read as follows:

**"903.2.11.7 High-piled combustible storage.** For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 to determine if those provisions apply."

147. Paragraph 903.2.11, "Specific Buildings Areas and Hazards," of Subsection 903.2, "Where Required," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is amended by adding a new Subparagraph 903.2.11.8, "Spray Booths and Rooms," to read as follows:

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

148. Paragraph 903.3.1, "Standards," of Subsection 903.3, "Installation

Requirements," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection

Systems," of the 2015 International Fire Code is amended to read as follows:

"**903.3.1 Standards.** Sprinkler systems shall be designed and installed in accordance with Sections 903.3.1.1, unless otherwise permitted by Sections 903.3.1.2 and 903.3.1.3 and other chapters of this code, as applicable.

**903.3.1.1 NFPA 13 sprinkler systems.** Where the provisions of this code require that a building or portion thereof be equipped throughout with an *automatic sprinkler system* in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in Sections 903.3.1.1.1 and 903.3.1.1.2..

**903.3.1.1.1 Exempt locations.** When *approved* by the *fire code official*, <u>a</u>[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 <u>under the direct control of a public utility</u> 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 and machinery spaces associated with occupant evacuation elevators designed in accordance with Section 3008 of the International Building Code.]

**903.3.1.1.2** <u>Residential systems.</u> 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

<u>permitted by other provisions of this code.</u> [Bathrooms. In Group R occupancies, other than Group R 4 occupancies, sprinklers shall not be required in bathrooms that do not exceed 55 square feet  $(5 \text{ m}^2)$  in area and are located within individual dwelling units or sleeping unites, provided that walls and ceilings, including the walls and ceilings behind a shower enclosure or tub, are of non combustible or limited combustible materials with a 15 minute thermal barrier rating.]

**903.3.1.2** NFPA 13R sprinkler systems. Automatic sprinkler systems in Group R occupancies up to and including four stories in height in buildings not exceeding 60 feet (18 288 mm) in height above grade plane shall be permitted to be installed throughout in accordance with NFPA 13R. However, for the purposes of exceptions or reductions permitted by other requirements of this code, see Section 903.3.1.1.3.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 of the <u>Dallas</u> [International] Building Code shall be measured from the horizontal assembly creating separate buildings.

**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 the building is of Type V construction, provided there is a roof or deck above. 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 sturctureal 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 Open-ended corridors.** Sprinkler protection shall be provided in openended corridors and associated exterior stairways and rams as specified in Section 1027.6, Exception 3.

903.3.1.2.3 Attics and attached garages. Sprinkler protection is required in attic spaces of such buildings two or more stories in height in accordance with NFPA 13 and or NFPA 13R requirements and attached garages.

**903.3.1.3 NFPA 13D sprinkler systems.** Automatic sprinkler systems installed in oneand two-family dwellings; Group R-3; Group R-4 Condition 1 (congregate living facilities) and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law. Refer also to Section 903.3.1.1.3 for additional requirements.

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

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

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

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

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

149. Paragraph 903.3.5, "Water Supplies," of Subsection 903.3, "Installation

Requirements," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection

Systems," of the 2015 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."

150. Subparagraph 903.3.5.2, "Residential Combination Services," of Paragraph 903.3.5, "Water Supplies," of Subsection 903.3, "Installation Requirements," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is amended to read as follows:

"903.3.5.2 [Residential c]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" 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."

151. Subsection 903.4, "Sprinkler System Supervision and Alarms," of Section 903,

"Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2015

International Fire Code is amended to read as follows:

"903.4 Sprinkler system supervision and alarms. All valves <u>on the building side of the water</u> <u>meter</u> controlling the water supply for *automatic sprinkler systems*, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a *listed* fire alarm control unit.

### **Exceptions:**

- 1. Automatic sprinkler systems protecting one- and two-family dwellings.
- 2. Limited area 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.

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."

### 152. Paragraph 903.4.2, "Alarms," of Subsection 903.4, "Sprinkler System Supervision

and Alarms," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection

Systems," of the 2015 International Fire Code is amended to read as follows:

"903.4.2 Alarms. <u>A weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating</u>, installed as close as practicable to the fire department connection, and [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."

153. Subsection 904.1, "General," of Section 904, "Alternative Automatic Fire-

Extinguishing Systems," of Chapter 9, "Fire Protection Systems," of the 2015 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."

154. Subsection 905.2, "Installation Standard," of Section 905, "Standpipe Systems,"

of Chapter 9, "Fire Protection Systems," of the 2015 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. <u>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.</u> Fire department connections for standpipe systems shall be in accordance with Section 912."

155. Paragraph 905.3.2, "Group A," of Subsection 905.3, "Required Installations," of

Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the 2015

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.]"
- 156. Subsection 905.3, "Required Installations," of Section 905, "Standpipe Systems,"

of Chapter 9, "Fire Protection Systems," of the 2015 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."
- 157. Subsection 905.4, "Location of Class I Standpipe Hose Connections," of Section

905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the 2015 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 or below grade. Hose connections shall be located at an intermediate landing between stories, unless otherwise *approved* by the *fire code official*.
- 2. On each side of the wall adjacent to the *exit* opening of a horizontal *exit*.

**Exception:** Where floor areas adjacent to a horizontal *exit* are reachable from an [interior] *exit* stairway hose 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 four units vertical in 12 units horizontal (33.3-percent slope), <u>each standpipe shall be provided with a two-way</u> [a] hose connection [shall be] located to serve the roof or at the highest landing of a 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*."
  - 158. Subsection 905.4, "Location of Class I Standpipe Hose Connections," of Section

905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International

Fire Code is amended by adding a new Paragraph 905.4.3, "Additional Requirements," to read as

follows:

### "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."
- 159. Paragraph 907.1.3, "Equipment," of Subsection 907.1, "General," of Section 907,

"Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015

International Fire Code is amended to read as follows:

"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."

160. Paragraph 907.1.3, "Equipment," of Subsection 907.1, "General," of Section 907,

"Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015

International Fire Code is amended by adding a new Subparagraph 907.1.3.1, "Prohibited

Equipment," to read as follows:

"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."

161. Subsection 907.1, "General," of Section 907, "Fire Alarm and Detection

Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is

amended by adding a new Paragraph 907.1.4, "Design Standards," to read as follows:

**"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."

162. Subsection 907.1, "General," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is amended by adding a new Paragraph 907.1.5, "Area Separation Walls/Fire Walls," to read as follows:

"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."

163. Subsection 907.2, "Where Required-New Buildings and Structures," of Section

907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015

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 <u>per building</u> in an *approved* location to initiate a fire alarm signal for fire alarm systems <u>and sprinkler monitoring systems</u> 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. <u>Where provided</u>, the manual fire alarm box shall not be located in an area that is accessible to the public.

#### 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.]"
- 164. Paragraph 907.2.1, "Group A," of Subsection 907.2, "Where Required-New

Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9,

"Fire Protection Systems," of the 2015 International Fire Code is amended to read as follows:

"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 [where the] having an occupant load of [due to the assembly occupancy is] 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in

accordance with Section 707.3.10 of the <u>Dallas</u> [International] Building Code shall be considered as a single occupancy for 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.

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."
- 165. Paragraph 907.2.2, "Group B," of Subsection 907.2, "Where Required-New

Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9,

"Fire Protection Systems," of the 2015 International Fire Code is amended to read as follows:

"907.2.2 Group B. A manual fire alarm system, and automatic fire detection system in paths of egress, 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.]"

166. Paragraph 907.2.3, "Group E," of Subsection 907.2, "Where Required-New

Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9,

"Fire Protection Systems," of the 2015 International Fire Code is amended to read as follows:

"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. When *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 <u>30</u> [<del>50</del>] or less when provided with an approved automatic sprinkler system.
- 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 activation of the manual fire alarm system initiates an *approved* occupant notification signal in accordance with Section 907.5.
- 3. [Manual fire alarm boxes and automatic fire detection are not required in Group E occupancies where all the following apply:
  - 3.1. Interior *corridors* are protected by smoke detectors with alarm verification.
  - 3.2. Auditoriums, cafeterias, gymnasiums and the like 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.

- 4.] Manual fire alarm boxes and fire detection in paths of egress shall not be required in Group E educational occupancies where all of the following apply:
  - <u>3[4].1.</u> The building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1.
  - $\underline{3}[4].2$ . The emergency voice/alarm communication system will activate on sprinkler water flow.

 $\underline{3}$ [4].3. Manual activation is provided from a normally occupied location.

4. 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<sup>1</sup>/<sub>2</sub> or less years of age, see Section 907.2.6)."

167. Paragraph 907.2.3, "Group E," of Subsection 907.2, "Where Required-New

Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9,

"Fire Protection Systems," of the 2015 International Fire Code is amended by adding a new

Subparagraph 907.2.3.1, "Exterior alarm-signaling device," to read as follows:

"**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."

168. Paragraph 907.2.6, "Group I," of Subsection 907.2, "Where Required - New

Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9,

"Fire Protection Systems," of the 2015 International Fire Code is amended by adding a new

Subparagraph 907.2.6.4, "Institutional Group I-4 Day Care Facilities," to read as follows:

"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 I-4 daycare 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."

169. Paragraph 907.2.7, "Group M," of Subsection 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9,

"Fire Protection Systems," of the 2015 International Fire Code is amended to read as follows:

"907.2.7 Group M. A manual fire alarm system and automatic fire detection in paths of egress that activate[s] 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 <u>and automatic fire detection in paths of egress</u> 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."
- 170. Subparagraph 907.2.7.1, "Occupant Notification," of Paragraph 907.2.7, "Group

M," of Subsection 907.2, "Where Required-New Buildings and Structures," of Section 907,

"Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015

International Fire Code is amended to read as follows:

"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 water flow 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."

171. Paragraph 907.2.13, "High-Rise Buildings," of Subsection 907.2, "Where

Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems,"

of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is amended to read

as follows:

"907.2.13 High-rise buildings. [High-rise] Buildings 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 and Section 412 of the <u>Dallas</u> [International] Building Code.
- 2. Open parking garages in accordance with Section 406.5 of the <u>Dallas</u> [International] Building Code.
- 3. <u>Open air portions of b[B]uildings with an occupancy in Group A-5 in accordance</u> with Section 303.6[4] of the <u>Dallas</u> [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 <u>Dallas</u> [*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 907.2.10, 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.

[M] 907.2.13.1.2 Duct smoke detection. Duct smoke detectors complying with Section 907.3.1 shall be located [as follows:

- 1.] 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 m<sup>3</sup>/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 emergency responder 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*."

172. 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

Systems," of the 2015 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. <u>Manual alarm actuating devices shall be an approved double action type.</u>"

173. Subparagraph 907.4.2.3, "Color," of 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 Systems," of the 2015 International Fire Code is

amended to read as follows:

"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*."

174. Subparagraph 907.4.2.3, "Color," of 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 Systems," of the 2015 International Fire Code is amended to read as follows:

"907.4.2.4 Signs. Where <u>approved</u> fire alarm systems are not monitored by a supervising station, 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."

175. Subparagraph 907.4.2.5, "Protective Covers," of 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 Systems," of the 2015 International Fire Code

is amended to read as follows:

"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* by the fire code official. Protective covers shall not project more than that permitted by Section 1003.3.3"

176. Subaragraph 907.5.2.2, "Emergency Voice/Alarm Communication System," of

Paragraph 907.5.2, "Alarm Notification Appliances," of Subsection 907.5, "Occupant Notification Systems," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is amended to read as follows:

907.5.2.2 Emergency voice/alarm communication system. Emergency voice/alarm communication systems required by this code shall be designed and installed in

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.

177. Subparagraph 907.5.2.3, "Visible Alarms," of Paragraph 907.5.2, "Alarm

Notification Appliances," of Subsection 907.5, "Occupant Notification Systems," of Section 907,

"Fire Alarm and Detection Systems," of Chapter 9, "Fire protection systems," of the 2015

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. <u>Visual alarm notification</u> 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 <u>storage areas of</u> <u>Group S occupancies (excluding parking garages and aircraft hangers used</u> <u>only for storage purposes [alterations, except where an existing fire alarm</u> <u>system is upgraded or replaced, or a new fire alarm system is installed</u>].
- 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.

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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."

178. Subparagraph 907.5.2.3, "Visible Alarms," of Paragraph 907.5.2, "Alarm

Notification Appliances," of Subsection 907.5, "Occupant Notification Systems" of Section 907,

"Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015

International Fire Code is amended by adding a new Item 907.5.2.3.4, "Notification Alarm

Continuation," to read as follows:

"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."

179. 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 Systems," of

the 2015 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 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.

**<u>907.6.1.2 Support.</u>** 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.

**<u>907.6.1.3</u>** 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.

**<u>907.6.1.4</u>** 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."

180. 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 Systems," of the 2015 International Fire Code is amended to read as follows:

"907.6.3 Initiating device identification. <u>All</u> [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. <u>Alarms shall not be permitted to be transmitted as a general alarm or zone condition.</u>

#### **Exceptions:**

- 1. Fire alarm systems in single-story buildings less than 22,500 square feet (2090 m<sup>2</sup>) 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.]"

181. 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

Systems," of the 2015 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 <u>Dallas</u> [International] Building Code shall transmit device identification in accordance with Section 907.6.3 to an [be monitored by 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** Automatic telephone-dialing devices. Automatic telephone-dialing devices used to transmit an emergency alarm shall not be connected to any fire department telephone number unless *approved* by the fire chief.

**907.6.6.2 Termination of monitoring service.** Termination of fire alarm monitoring services shall be in accordance with Section 901.9.

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

182. Subsection 907.7, "Acceptance Tests and Completion," of Section 907, "Fire

Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015

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 <u>and *approved*</u> in accordance with NFPA 72 and Section 901.5."

183. Section 909, "Smoke Control Systems," of Chapter 9, "Fire Protection Systems,"

of the 2015 International Fire Code is amended by adding a new Subsection 909.22, "Stairway or

Ramp Pressurization Alternative," to read as follows:

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

**[F] 909.22.1 Ventilating equipment.** The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smokeproof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, the mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

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

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

### **Exceptions:**

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

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

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

184. Subsection 910.2, "Where Required," of Section 910, "Smoke and Heat

Removal," of Chapter 9, "Fire Protection Systems," of the 2015 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 <u>through [and]</u> 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. <u>Only manual s[S]</u>moke and heat removal shall [not] be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. <u>Automatic smoke</u> and heat removal is prohibited.
- 3. <u>Only manual s[S]</u>moke and heat removal shall [not] be required in areas of buildings equipped with control mode special application sprinklers with a response time index of 50(m\*S)<sup>1/2</sup> or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. <u>Automatic smoke and heat removal is prohibited.</u>

**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  $m^2$ ) 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. Buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m<sup>2</sup>) 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."

185. Subsection 910.3, "Smoke and Heat Vents," of Section 910 "Smoke and Heat

Removal," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is

amended by adding a new Paragraph 910.3.4, "Vent Operation," 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 910.3.2.1 through 910.3.2.3.

**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 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

**Exception:** Manual only systems per Section 910.2.

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

Exception: Listed gravity-operated drop out vents."

186. 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 Systems," of the 2015 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."

187. 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

Systems," of the 2015 International Fire Code is amended to read as follows:

"910.4.4 Activation. The mechanical smoke removal system shall be activated <u>automatically</u> 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."

188. Subsection 912.2, "Location," of Section 912, "Fire Department Connections," of

Chapter 9, "Fire Protection Systems," of the 2015 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 chief.

**912.2.1 Visible location.** Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise *approved* by the *fire <u>code official</u> [<i>chief*].

**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. All 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."

189. Subsection 913.1, "General," of Section 913, "Fire Pumps," of Chapter 9, "Fire

Protection Systems," of the 2015 International Fire Code is amended to read as follows:

"913.1 General. Where provided, fire pumps shall be installed in accordance with this section, the *Dallas Building Code*, 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."

190. Subsection 913.4, "Valve Supervision," of Section 913, "Fire Pumps," of Chapter

9, "Fire Protection Systems," of the 2015 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.

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- 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."

191. Section 913, "Fire Pumps," of Chapter 9, "Fire Protection Systems," of the

2015 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."

192. 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 Systems," of the 2015 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  $\underline{120}$  [420] feet (<u>36.6</u> [<u>428</u>] m) in *building height*, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

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

#### 193. Paragraph 1004.1.2, "Areas Without Fixed Seating," of Subsection 1004.1,

"Design Occupant Load," of Section 1004, "Occupant Load," of Chapter 10, "Means of Egress,"

of the 2015 International Fire Code is amended to read as follows:

"[B] 1004.1.2 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 1004.1.2. 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 1004.1.2. Where an intended function is not listed in Table 1004.1.2, 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*.]"

194. Subsection 1004.5, "Outdoor Areas," of Section 1004, "Occupant Load," of

Chapter 10, "Means of Egress," of the 2015 International Fire Code is amended to read as

follows:

"[B] 1004.5 Outdoor areas. Yards, patios, 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.

- 1. Outdoor areas used exclusively for service of the building need only have one *means* of egress.
- 2. <u>The occupant load of the outdoor area need not be added to the building's total</u> <u>occupant load if:</u> [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 less 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."
- 195. Subparagraph 1006.2.2.4, "Day Care Means of Egress," of Paragraph 1006.2.2,

"Egress Based on Use," of Subsection 1006.2, "Egress from Spaces," of Section 1006, "Number

of Exits and Exit Access Doorways," of Chapter 10, "Means of Egress," of the 2015

International Fire Code is amended to read as follows:

"1006.2.2.4 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. <u>Rooms normally occupied by preschool</u>, <u>kindergarten</u>, or first grade students shall be located on a level of exit discharge."

196. Subsection 1007.1.1, "Two Exits or Exit Access Doorways," of Subsection

1007.1 "General," of Section 1007, "Exit or Exit Access Doorway Configuration," of Chapter

10, "Means of Egress," of the 2015 International Fire Code is amended to read as follows:

"[B] 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.

- 1. Where interior *exit stairways* or ramps are interconnected by a 1-hour fireresistance-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-<u>fourth [third]</u> 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:

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- 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, except as otherwise noted in the exception."
- 197. Subsection 1009.1, "Accessible Means of Egress Required," of Section 1009,

"Accessible Means of Egress," of Chapter 10, "Means of Egress," of the 2015 International Fire

Code is amended to read as follows:

"[B] 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.

- 1. Accessible means of egress are not required to be provided in existing buildings.
- 2. One *accessible means of egress* is required from an *accessible mezzanine* level in accordance with Section 1009.3, 1009.4 or 1009.5.
- 3. In assembly areas with ramped aisles or stepped *aisles*, one *accessible means of egress* is permitted where the common path of egress travel is *accessible* and meets the requirements in Section 1029.8.
- 4. 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."

198. Subsection 1010.1, "Doors," of Section 1010, "Doors, Gates and Turnstiles," of

Chapter 10, "Means of Egress," of the 2015 International Fire Code is amended to read as

follows:

"1010.1 Doors. *Means of egress* doors shall meet the requirements of the section. Doors serving a *means of egress* system shall meet the requirements of this section and Section 1022.2. Doors provided for egress purposes in numbers greater than required by this code shall meet the requirements of this section.

*Means of egress* doors 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*."

199. Subparagraph 1010.1.9.4, "Bolt Locks," of Paragraph 1010.1.9, "Door

Operations," of Subsection 1010.1, "Doors," of Section 1010, "Doors, Gates and Turnstiles," of

Chapter 10, "Means of Egress," of the 2015 International Fire Code is amended to read as

follows:

"[B] 1010.1.9.4 Bolt locks. Manually operated flush bolts or surface bolts are not permitted.

- 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 <u>A</u>, B, F, <u>M</u> 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 I-2 occupancies, selflatching 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."
- 200. Subparagraph 1010.1.9.9, "Electromagnetically Locked Egress Doors," of

Paragraph 1010.1.9, "Door Operations," of Subsection 1010.1, "Doors," of Section 1010,

"Doors, Gates and Turnstiles," of Chapter 10, "Means of Egress," of the 2015 International Fire

Code is amended to read as follows:

"1010.1.9.9 Electromagnetically Locked Egress Doors/Electronic Locking Devices. Doors in the means of egress in buildings in all occupancies [with an occupancy in Group A, B, E, I 1, I 2, I 4, M, R 1 or R 2] and doors to tenant spaces in all occupancies [Group A, B, E, I 1, I 2, I 4, M, R 1 or R 2] shall be permitted to be locked with an electromagnetic locking system where equipped with hardware that incorporates a built in switch, the building is protected throughout by an automatic sprinkler system or by a fire alarm system or smoke detection system or with UL 268 smoke detectors installed on each interior side of all doors provided with electronic locks, and [where] installed and operated in accordance with all of the following:

- 1. The hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.
- 2. The hardware is capable of being operated with one hand.
- 3. Operation of the hardware directly interrupts the power to the electromagnetic lock and unlocks the door immediately.
- 4. Loss of power to the locking system automatically unlocks the door.
- 5. Where panic or fire exit hardware is required by Section 1010.1.10, operation of the panic or fire exit hardware also releases the electromagnetic 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.

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**1010.1.9.9.1** 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, shall always be provided.

#### **Exceptions:**

- 1. Locations for occupants needing self-protection because of reduced mental capacities such as mental hospitals of Alzheimer care as further specified in Section 1010.1.9.9.4.
- 2. Locations where national security interest are present with approval of the building official.
- 3. <u>Modified arrangements may be made for hospital nursery wards with approval of the building official.</u>

(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.)

**1010.1.9.9.2 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 as set forth herein. General guidelines for such installation shall be 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 1010.1.9.9.4.
- 3. For emergency situations, buildings shall be provided with an automatic release mechanism as specified in Section 1010.1.9.9.5.
- 4. Once released, the door shall swing freely as a push/pull door. For specific provisions and exceptions, see Section 1010.1.9.9.6.
- 5. Request to exit buttons, break glass boxes and emergency pull boxes, with their required signs, shall be installed in accordance with Sections 1010.1.9.9.4 and 1010.1.9.9.7.
- 6. All devices used in a fire rated/fire door situation shall be approved for such

<u>use.</u>

**1008.1.9.9.3 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 work. Delayed egress locks meeting the criteria set forth in Section 1010.1.9.7 will not require separate permits. Electronic security devices must be *approved* by the building official and must be functionally tested by the *fire code official*.

**1010.1.9.9.4 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 1010.1.9.9.7.

Other acceptable normal release methods 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. 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 1010.1.9.9.7 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 installations that must 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. A manual override system must be installed to permit access to the stairs.
- 2. Warehouses/factories where employees are required to enter and *exit* through one point. Use of other building *exits* is undesired and controlled. A manual override system must still be installed at the controlled *exits*.
- 3. Secured systems where employee ingress/egress is monitored at all secured

#### doors. A manual override system must 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 must 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 twenty-four-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.

**1010.1.9.9.5** 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 water flow 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, electronic device, or the fire alarm system. 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 1010.1.9.9.4 and as further specified in Section 1010.1.9.9.7.

<u>Manual resetting of the devices is not required. Automatically resetting of the devices</u> <u>may be done by zones.</u>

**1010.1.9.9.5.1 Zone control.** Deactivation of devices may be zone controlled as follows:

- 1. All devices on the same floor as the source of activation in fully sprinklered buildings.
- 2. <u>All devices on the same floor as the source of activation of the smoke</u> <u>detection system plus one floor below and all floors above in</u> <u>unsprinklered buildings.</u>

(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 *exit*ing 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 *exit*ing but entry by card or code is not available until the system resets.

No such provision 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.)

**1010.1.9.9.6 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 *exit*ing but entry is controlled. Or, use of an electronic doorknob where *exit*ing 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;
- 2. If the latch should be designed to fail in the secure position; or
- 3. Whether to deny the usage of the locks.

<u>1010.1.9.9.7 Request to exit buttons/break glass boxes/emergency pull boxes.</u> 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 2-inch (50.8 mm) mushroom switch or 2-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 5 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 1 inch (25 mm) in height and shall have a stroke of not less than <sup>1</sup>/<sub>8</sub> 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."

201. Subparagraph 1010.1.9.11, "Stairway Doors," of Paragraph 1010.1.9, "Door

Operations," of Subsection 1010.1, "Doors," of Section 1010, "Doors, Gates and Turnstiles," of

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Chapter 10, "Means of Egress," of the 2015 International Fire Code is amended to read as

follows:

"1010.1.9.11 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 <u>buildings other than a high-rise building</u> [not more than four stories], doors are permitted to be locked from the side opposite the egress side, provided 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 1006.3.2.
- 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 1006.3.2."
- 202. Subsection 1011.9, "Curved Stairways," of Section 1011, "Stairways," of Chapter

10, "Means of Egress," of the 2015 International Fire Code is amended to read as follows:

"**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:

<u>1.</u> 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.*"
- 203. Subsection 1016.2, "Egress Through Intervening Spaces," of Section 1016, "Exit

Access," of Chapter 10, "Means of Egress," of the 2015 International Fire Code is amended to

read as follows:

"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. Access to not less than one of the required *exits* shall be provided without travel through the enclosed elevator lobbies required by Section 3006.2, 3007 or 3008 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.

- 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."

204. Table 1017.2, "Exit Access Travel Distance," of Subsection 1017.2,

"Limitations," of Section 1017, "Exit Access Travel Distance," of Chapter 10, "Means of

Egress," of the 2015 International Fire Code is amended to read as follows:

EXIT ACCESS TRAVEL DISTANCE <sup>a</sup>					
OCCUPANCY	WITHOUT SPRINKLER SYSTEM	WITH SPRINKLER SYSTEM			
	(feet)	(feet)			
A, E, [ <del>F-1,</del> ] M, R[ <del>, S-1</del> ]	200	250 <sup>b</sup>			
I-1	Not Permitted	250°			
B <u>, F-1, S-1</u>	200	300°			
F-2, S-2, U	300	400 <sup>b</sup>			
H-1	Not Permitted	75°			
H-2	Not Permitted	100 <sup>c</sup>			
H-3	Not Permitted	150°			
H-4	Not Permitted	175°			
H-5	Not Permitted	200°			
I-2, I-3, I-4	Not Permitted	200°			

#### "Table 1017.2 EXIT ACCESS TRAVEL DISTANCE<sup>a</sup>

For SI: 1 foot = 304.8 mm.

a. See the following sections for modifications to exit access travel distance requirements: Section 402.8 of the *Dallas* [*International*] *Building Code*: For the distance limitation in malls.

Section 404.9 of the <u>Dallas</u> [International] Building Code: For the distance limitation through an atrium space.

Section 407.4 of the *Dallas* [*International*] *Building Code*: For the distance limitation in Group I-2.

Sections 408.6.1 and 408.8.1 of the *Dallas* [*International*] *Building Code*: For the distance limitations in Group I-3.

Section 411.4 of the <u>Dallas</u> [International] Building Code: For the distance limitation in special amusement buildings.

Section 412.7 of the <u>Dallas</u> [International] Building Code: For the distance limitations in aircraft manufacturing facilities.

Section 1006.2.2.2: For the distance limitation in refrigeration machinery rooms.

Section 1006.2.2.3: For the distance limitation in refrigerated rooms and spaces.

Section 1006.3.2: For buildings with one exit.

Section 1017.2.2: For increased limitation in Groups F-1 and S-1..

Section 1029.7: For increased limitation in assembly seating.

Section 3103.4 of the *Dallas* [International] Building Code: For temporary structures.

Section 3104.9 of the *Dallas* [*International*] *Building Code*: For pedestrian walkways.

- b. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.2.
- c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- d. Group H occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.2.5.1.

205. Subsection 1020.1, "Construction," of Section 1020, "Corridors," of Chapter 10,

"Means of Egress," of the 2015 International Fire Code is amended to read as follows:

"1020.1 Construction. *Corridors* shall be fire-resistance rated in accordance with Table 1020.1(1). The *corridor* walls required to be fire-resistance rated shall comply with Section 708 of the *Dallas* [*International*] *Building Code* for fire partitions.

- 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 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 602 of the <u>Dallas</u> [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 1020.1(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."

206. Table 1020.1, "Corridor Fire-Resistance Rating," of Subsection 1020.1,

"Construction," of Section 1020, "Corridors," of Chapter 10, "Means of Egress," of the 2015

International Fire Code is amended to read as follows:

		REQUIRED FIRE-RESISTANCE RATING (hours)				
OCCUPANCY	SERVED BY CORRIDOR	Without sprinkler system	With sprinkler system <sup>°</sup>			
H-1, H-2, H-3	All	Not Permitted	1			
H-4, H-5	Greater than 30	Not Permitted	1			
A, B, E, F, M, S, U	Greater than 30	1	0			
R <sup>d</sup>	Greater than 10	Not Permitted	0.5			
I-2 <sup>a</sup> , I-4	All	Not Permitted	0			
I-1, I-3	All	Not Permitted	1 <sup>b</sup>			

#### "TABLE 1020.1(<u>1)</u> CORRIDOR FIRE-RESISTANCE RATING

a. For requirements for occupancies in Group I-2, see Sections 407.2 and 407.3 of the <u>Dallas</u> [International] Building Code.

b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.8 of the <u>Dallas</u> [International] Building Code.

- c. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.
- d. In Group R, Divisions 2 and 4 equipped throughout with an *automatic sprinkler system* in accordance with Sections 903.3.1.1 or 903.3.1.2, standard ½-inch gypsum wallboard may be substituted for Type X gypsum wallboard in construction of the *corridor*. *Corridor* openings shall be protected with *approved* self-closing 1¾-inch solid-core wood door installations or *approved* equivalent. See Section 717 in the *Dallas Building Code* for requirements on fire and smoke dampers."

207. Subsection 1020.1, "Construction," of Section 1020, "Corridors," of Chapter 10,

"Means of Egress," of the 2015 International Fire Code is amended by adding Table 1020.1(2),

"Corridor Fire-Resistance Rating of Single Tenant Space," to read as follows:

#### **"TABLE 1020.1(2)** CORRIDOR FIRE-RESISTANCE RATING OF SINGLE TENANT SPACE

REQUIRED FIRE-RESISTANCE RATING (hours)

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CATEGORY	NATURE OF OCCUPANCY SERVED BY CORRIDOR	Without smoke detectors	With smoke detectors
Ι	Uses and occupancies except those listed in Categories	1	0
	II and III		
TT	Buildings and other structures	1	1
	that represent a substantial		
	hazard to human life in the event		
	of failure, including but not		
	limited to:		
	• Buildings and other structures		
	whose primary occupancy is		
	public assembly with an		
	occupant load greater than 300.		
	• Buildings and other structures		
	containing elementary school,		
	secondary school or day care		
	facilities with an occupant load		
	greater than 250.		
	• Buildings and other structures		
	facilities such as colleges and		
	universities, with an occupant		
	load greater than 500		
	• Group I-2 occupancies with an		
	occupant load of 50 or more		
	resident care recipients but not		
	having surgery or emergency		
	treatment facilities.		
	Group I-3 occupancies.		
	• Any other occupancy with an		
	occupant load greater than 5,000.		
	• Power-generating stations,		
	water treatment facilities for		
	potable water, waste water		
	treatment facilities and other		
	public utility facilities not		
	• Buildings and other structures		
	not included in Risk Category III		
	containing quantities of toxic or		
	explosive materials that		
	Exceed maximum allowable		
	quantities per control area as		
	given in Table 307.1(1) or		
	307.1(2) or per outdoor control		
	area in accordance with the		
	Dallas Fire Code; and		
	Are sufficient to pose a threat to		
	the public if released.		
III	Buildings and other structures	1	1

4	designated as essential facilities,	
	including but not limited to:	
	Group I-2 occupancies having	
	surgery or emergency treatment	
	facilities.	
	• Fire, rescue, ambulance and	
	police stations and emergency	
	vehicle garages.	
	• Designated earthquake,	
	hurricane or other emergency	
	shelters.	
	<ul> <li>Designated emergency</li> </ul>	
	preparedness, communications	
•.	and operations centers and other	
	facilities required for emergency	
	response.	
	• Power-generating stations and	
	other public utility facilities	
	required as emergency backup	
	facilities for Risk Category III	
	structures.	
	• Buildings and other structures	
	containing quantities of highly	
	toxic materials that:	
	Exceed maximum allowable	
	quantities per control area as	
	given in Table 307.1(2) or per	
	outdoor control area in	
	accordance with the Dallas Fire	
	Code; and	
	are sufficient to pose a threat to	
	the public if released.	
	• Aviation control towers, air	
	traffic control centers and	
	emergency aircraft hangars.	
	• Buildings and other structures	
	having critical national defense	
	functions.	
	• Water storage facilities and	
	pump structures required to	
	maintain water pressure for fire	
	suppression.	

a. For requirements for occupancies in Group I-2, see Section 407.2 of the Dallas Building Code. b. For requirements for occupancies in Group I-3, see Section 408.8 of the Dallas Building Code."

208. Subsection 1020.4, "Dead Ends," of Section 1020, "Corridors," of Chapter 10,

"Means of Egress," of the 2015 International Fire Code is amended to read as follows:

"1020.4 Dead ends. Where more than one *exit* or *exit* access doorway is required, the *exit* access shall be arranged such that there are no dead ends in *corridors* more than 20 feet (6096 mm) in length.

#### **Exceptions:**

- 1. In occupancies in Group I-3 of Occupancy Condition 2, 3 or 4, the dead end in a *corridor* shall not exceed 50 feet (15 240 mm).
- 2. In occupancies in Groups B, E, F, I-1, M, R-1, R-2, R-4, S and U, where the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, the length of dead-end *corridors* shall not exceed 50 feet (15 240 mm).
- 3. A dead-end *corridor* shall not be limited in length where the length of the dead-end *corridor* is less than 2.5 times the least width of the dead-end *corridor*.
- 4. In a Group I, Division 2 occupancy building used as a hospital or nursing home and equipped throughout with an *approved automatic sprinkler system*, the maximum dead-end distance shall not exceed 30 feet (9144 mm)."
- 209. Subparagraph 1029.1.1.1, "Spaces Under Grandstands and Bleachers," of

Paragraph 1029.1.1, "Bleachers," of Subsection 1029.1, "General," of Section 1029,

"Assembly," of Chapter 10, "Means of Egress," of the 2015 International Fire Code is deleted.

210. Subsection 1030.1, "General," of Section 1030, "Emergency Escape and Rescue,"

of Chapter 10, "Means of Egress," of the 2015 International Fire Code is amended to read as

follows:

"1030.1 General. In addition to the *means of egress* required by this chapter, provisions shall be made for *emergency escape and rescue openings* in Group <u>R and I-1</u> [R-2] occupancies [in accordance with Tables 1006.3.2(1) and 1006.3.2(2) and Group R 3 occupancies]. Basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency escape and rescue openings 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.

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- 3. Basements without habitable spaces and having not more than 200 square feet (18.6  $m^2$ ) in floor area shall not be required to have emergency escape and rescue openings.
- 4. In other than Group R-3 occupancies, buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2."
- 211. Subsection 1031.2, "Reliability," of Section 1031, "Maintenance of the Means of

Egress," of Chapter 10, "Means of Egress," of the 2015 International Fire Code is amended to

read as follows:

"1031.2 Reliability. Required *exit accesses, exits* and *exit discharges* shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency [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."

212. Section 1101, "General," of Chapter 11, "Construction Requirements for Existing

Buildings," of the 2015 International Fire Code is amended by adding 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 Communication requirements. Refer to Section 907.6.6 for applicable requirements."

Subsection 1103.5, "Sprinkler Systems," of Section 1103, "Fire Safety 213. Requirements for Existing Buildings," of Chapter 11, "Construction Requirements for Existing Buildings," of the 2015 International Fire Code is amended by adding a new subsection to read

as follows:

"1103.5.4 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."

Subsection 1103.7, "Fire Alarm Systems," of Section 1103, "Fire Safety 214.

Requirements for Existing Buildings," of Chapter 11, "Construction Requirements for Existing

Buildings," of the 2015 International Fire Code is amended by adding Paragraphs 1103.7.8,

"Group A," 1103.7.9, "Group B," and 1103.7.10, "Group M," to read as follows:

"1103.7.8 Group A. A fire alarm system shall be installed in existing Group A occupancies in accordance with Section 907.2.1.

**Exception:** Group A-5 occupancies.

1103.7.9 Group B. A fire alarm system shall be installed in existing Group B occupancies in accordance with Section 907.2.2.

1103.7.10 Group M. A fire alarm system shall be installed in existing Group M occupancies in accordance with Section 907.2.7."

Paragraph 2006.4.4, "Operators," of Subsection 2006.4, "Operation, Maintenance 215.

and Use of Aircraft-Fueling Vehicles," of Section 2006, "Aircraft Fueling," of Chapter 20,

"Aviation Facilities," of the 2012 International Fire Code is amended to read as follows:

"2006.4.4 Operators. Aircraft-fueling vehicles [that are operated by a person, firm or corporation other than the permittee or the permittee's authorized employee] shall be provided with a legible sign visible from outside the vehicle showing the name of the

person, firm or corporation operating such unit."

216. Subsection 2301.1, "Scope," of Section 2301, "General," of Chapter 23, "Motor

Fuel-Dispensing Facilities and Repair Garages," of the 2015 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 <u>Dallas</u> [International] Building Code, <u>Dallas</u> [International] Fuel Gas Code and <u>Dallas</u> [International] Mechanical Code. Such operations shall include both those that are accessible 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."

217. Subsection 2301.3, "Construction Documents," of Section 2301, "General," of

Chapter 23, "Motor Fuel-Dispensing Facilities and Repair Garages," of the 2015 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 105.4]. Additionally, a site plan shall be submitted that illustrates 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 above-ground 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. <u>Compressed natural gas</u>: 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."
  - 218. Subsection 2304.1, "Supervision of Dispensing," of Section 2308, "Dispensing

Operations," of Chapter 23, "Motor Fuel-Dispensing Facilities and Repair Garages," of the 2015

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: [Section 2204.3.]

- 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."

219. Subsection 2311.2, "Storage and Use of Flammable and Combustible Liquids," of

Section 2311, "Repair Garages," of Chapter 23, "Motor Fuel-Dispensing Facilities and Repair

Garages," of the 2015 International Fire Code is amended by adding a new Paragraph 2311.2.5,

"Spontaneous Ignition," to read as follows:

"2311.2.5 Spontaneous ignition. Materials susceptible to spontaneous ignition, such as rags containing flammable or combustible liquids and similar materials, shall be stored in a *listed* disposal container."

220. Subsection 2401.2, "Nonapplicability," of Section 2401, "General," of Chapter

24, "Flammable Finishes," of the 2015 International Fire Code is deleted.

221. Subsection 2404.2, "Location of Spray-Finishing Operations," of Section 2404,

"Spray Finishing," of Chapter 24, "Flammable Finishes," of the 2012 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 chief."

222. Subsection 2404.4, "Fire Protection," of Section 2404, "Spray Finishing," of

Chapter 24, "Flammable Finishes," of the 2015 International Fire Code is amended to read as

follows:

"2404.4 Fire protection. <u>New and existing s[S]</u>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."

223. Subsection 2410.4, "Ignition Sources," of Section 2410, "Floor Surfacing and

Finishing Operations," of Chapter 24, "Flammable Finishes," of the 2015 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. <u>Open-flame devices and electrical equipment not classified for use in Class I locations</u>, as defined in the *Dallas Electrical Code*, shall not be operated during or within four hours of the application of flammable or combustible liquids."

224. 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 the 2015 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."

225. Chapter 31, "Tents and Other Membrane Structures," of the 2015 International

Fire Code is retitled as Chapter 31, "Tents, Canopies, Other Membrane Structures and Exhibition

Halls."

226. Subsection 3103.2, "Approval Required," of Section 3103, "Temporary Tents and

Membrane Structures," of Chapter 31, "Tents, Canopies, Other Membrane Structures and

Exhibition Halls," of the 2015 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 <u>399</u> [400] square feet (37 m<sup>2</sup>) shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the *fire code official*. <u>Site plans shall</u> 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. <u>Fabric canopies and t[</u>**F**]ents open on all sides that comply with all of the following:
  - 2.1. Individual tents <u>and canopies</u> having a maximum size of 700 square feet (65  $m^2$ ).
  - 2.2. The aggregate area of multiple tents <u>or canopies</u> placed side by side without a fire break clearance of 12 feet (3658 mm) not exceeding 700 square feet  $(65 \text{ m}^2)$  total.
  - 2.3. A minimum clearance of 12 feet (3658 mm) to all structures and other tents or canopies.
- <u>3.</u> <u>Awnings.</u>
- 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."
- 227. Subsection 3103.8, "Access, Location and Parking," of Section 3103, "Temporary

Tents and Membrane Structures," of Chapter 31, "Tents and Other Membrane Structures and

Exhibition Halls," of the 2015 International Fire Code is amended to read as follows:

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"**3103.8** Access, location and parking. Access, location and parking for temporary tents and membrane structures shall be in accordance with this section <u>and the *Dallas Development Code*</u>."

228. Subsection 3104.5, "Combustible Materials," of Section 3104, "Temporary and

Permanent Tents and Membrane Structures," of Chapter 31, "Tents, Canopies, Other Membrane

Structures and Exhibition Halls," of the 2015 International Fire Code is amended to read as

follows:

"**3104.5 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 chief."

229. Subsection 3104.6, "Smoking," of Section 3104, "Temporary and Permanent

Tents and Membrane Structures," of Chapter 31, "Tents, Canopies, Other Membrane Structures

and Exhibition Halls," of the 2015 International Fire Code is amended to read as follows:

"**3104.6 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."

230. Subsection 3104.7, "Open or Exposed Flame," of Section 3104, "Temporary and

Permanent Tents and Membrane Structures," of Chapter 31, "Tents, Canopies, Other Membrane

Structures and Exhibition Halls," of the 2015 International Fire Code is amended to read as

follows:

"**3104.7 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, <u>canopy</u> or membrane structures while open to the public unless *approved* by the fire code official. <u>When *approved*</u>, 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."

231. Paragraph 3104.15.5, "Cooking Tents," of Subsection 3104.15, "Heating and Cooking Equipment," of Section 3104, "Temporary and Permanent Tents and Membrane Structures," of Chapter 31, "Tents, Canopies, Other Membrane Structures and Exhibition Halls," of the 2015 International Fire Code is amended to read as follows:

"**3104.15.5 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."

232. Subsection 3104.16, "LP-Gas," of Section 3104, "Temporary and Permanent

Tents and Membrane Structures," of Chapter 31, "Tents, Canopies, Other Membrane Structures

and Exhibition Halls," of the 2015 International Fire Code is amended by adding a new

Paragraph 3104.16.4, "Places of Exhibition," to read as follows:

"**3104.16.4 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*.

**3104.16.4.1 Capacity.** When used inside structures, LP-gas containers shall not exceed a water capacity greater than 12 pounds (5 kg)."

233. Paragraph 3104.17.3, "Refueling," of Subsection 3104.17, "Flammable and

Combustible Liquids," of Section 3104, "Temporary and Permanent Tents and Membrane

Structures," of Chapter 31, "Tents, Canopies, Other Membrane Structures and Exhibition Halls,"

of the 2015 International Fire Code is amended to read as follows:

"**3104.17.3 Refueling.** Refueling shall be performed in an *approved* location not less than 20 feet (6096 mm) from tents, <u>canopies</u> or membrane structures. <u>Fuel tanks shall be of adequate</u> 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.*"

234. Chapter 31, "Tents, Canopies, Other Membrane Structures and Exhibition Halls,"

of the 2015 International Fire Code is amended by adding a new Section 3105, "Exhibition

Halls," to read as follows:

#### **"SECTION 3106** EXHIBITION HALLS

**3106.1 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.

**3106.1.1 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.

**3106.1.2 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.

**3106.1.3 Compliance with plans.** The exhibit shall be constructed, operated and maintained in accordance with this code and the *approved* plans.

**3106.2 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 chief two copies of accurately scaled plans and two lists of materials to be used in the construction.

**3106.3 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.

**3106.4 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 chief 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).

**3106.5 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.

**3106.6 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*.

**3106.7 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.

**3106.8 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 chief;
- 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.

**3106.9 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*.

**3106.10 Sawdust and shavings.** The operator of premises used as a place of exhibition shall keep sawdust and shavings flameproofed.

**3106.11 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*.

**3106.12 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.

**3106.13 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*."
  - 235. Footnote J 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 the 2015 International Fire Code is amended to read as

follows:

- "j. [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 (m • s)<sup>1/2</sup> 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."
  - 236. Subsection 3207.2, "Fire Protection," of Section 3207, "Solid-Piled and Shelf

Storage," of Chapter 32, "High-Piled Combustible Storage," of the 2015 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 <u>Dallas</u> [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 <u>Dallas</u> [International] Building Code and NFPA 13."

237. Subsection 3208.2, "Fire Protection," of Section 3208, "Rack Storage," of

Chapter 32, "High-Piled Combustible Storage," of the 2015 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 <u>Dallas</u> [International] Building Code. Openings in such fire barriers shall be protected by opening protectives having 1.5-hour fire protection ratings. 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 <u>Dallas</u> [International] Building Code."

238. Subsection 3308.5, "Hot Work Operations," of Section 3308, "Owner's

Responsibility for Fire Protection," of Chapter 33, "Fire Safety During Construction and

Demolition," of the 2015 International Fire Code is amended to read as follows:

**"3308.5 Hot work operations.** The fire prevention program superintendent shall be responsible for supervising the [permit system for] hot work operations in accordance with Chapter 35."

239. Subsection 3310.1, "Required Access," of Section 3310, "Access for Fire

Fighting," of Chapter 33, "Fire Safety During Construction and Demolition," of the 2015

International Fire Code is amended to read as follows:

"3310.1 Required access. Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 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."

240. Subsection 3311.1, "Stairways Required," of Section 3311, "Means of Egress," of Chapter 33, "Fire Safety During Construction and Demolition," of the 2015 International Fire Code is amended to read as follows:

"3311.1 Stairways required. Where a building has been constructed to a *building height* of  $\underline{35}$  [50] feet (10 668 [15 240] mm) or three [four] stories, or where an existing building exceeding  $\underline{35}$  [50] feet (10 668 [15 240] mm) in *building height* is altered, not less than one temporary lighted *stairway* shall be provided unless one or more of the permanent *stairways* are erected as the construction progresses."

241. Subsection 3313.1, "Where Required," of Section 3313, "Standpipes," of Chapter

33, "Fire Safety During Construction and Demolition," of the 2015 International Fire Code is

amended to read as follows:

"3313.1 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 when the progress of construction is not more than 35 [40] feet (10 668 [12–192] mm) in height above the lowest level of fire department vehicle access. Such standpipe shall be provided with  $2\frac{1}{2}$  inch fire department hose outlet connections with  $7\frac{1}{2}$  inch national standard fire hose coupling screw threads per inch, at accessible locations adjacent to usable stairways. Such standpipes, wet or dry, shall be monitored for damage by a waterflow or pressure switch (10 psi minimum) and audible alarm. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring."

242. Section 3409, "Indoor Storage Arrangement," of Chapter 34, "Tire Rebuilding

and Tire Storage," of the 2015 International Fire Code is amended to read as follows:

#### "SECTION 3409 INDOOR STORAGE ARRANGEMENT

**3409.1 Pile dimensions** <u>less than 6 feet in height</u>. 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."

243. Subsection 3502.1, "Definitions," of Section 3502, "Definitions," of Chapter 35,

"Welding and Other Hot Work," of the 2015 International Fire Code is amended to read as

follows:

"3502.1 Definitions. The following words and terms are defined in Chapter 2:

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HOT WORK.

HOT WORK AREA.

HOT WORK EQUIPMENT.

HOT WORK PERMITS.

[HOT WORK PROGRAM.

#### **RESPONSIBLE PERSON.**]

#### TORCH-APPLIED ROOF SYSTEM."

244. Subsection 3503.3, "Hot Work Program Permit," of Section 3503, "General Requirements," of Chapter 35, "Welding and Other Hot Work," of the 2015 International Fire

Code is deleted.

245. 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 the

2015 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."

246. Subsection 3504.3, "Area Reviews," of Section 3504, "Fire Safety

Requirements," of Chapter 35, "Welding and Other Hot Work," of the 2015 International Fire

Code is amended to read as follows:

"**3504.3 Area reviews.** Before hot work is permitted and not less than once per day while the permit is in effect, the area shall be inspected by the individual responsible for <u>the</u> [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.]"

247. Subsection 3505.5, "Remote Locations," of Section 3505, "Gas Welding and Cutting," of Chapter 35, "Welding and Other Hot Work," of the 2015 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."

248. Subsection 5001.5, "Permits," of Section 5001, "General," of Chapter 50,

"Hazardous Materials—General Provisions," of the 2015 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 chief. Plans must include the following:

- 1. Amounts of hazardous materials involved.
- 2. Material 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."
249. Subsection 5003.12, "Outdoor Control Areas," of Section 5003, "General

Requirements," of Chapter 50, "Hazardous Materials-General Provisions," of the 2015

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:

- 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 lot line that can be built upon, public street, public alley or public way.

#### **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 (15 240 mm).
- 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."
  - 250. 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 the 2015 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."

251. Subsection 5306.2, "Interior Supply Location," of Section 5306, "Medical

Gasses," of Chapter 53, "Compressed Gases," of the 2015 International Fire Code is amended to

read as follows:

"5306.2 Interior supply location. Medical gases shall be stored in areas dedicated to the storage of such gases without other storage or uses. Where containers of medical gases in quantities greater than the <u>exempt</u> [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 <u>Dallas</u> [International] Building Code for high-hazard Group H occupancies."

252. Paragraph 5307.5.2, "Emergency Alarm System," of Subsection 5307.5,

"Required Protection," of Section 5307, "Carbon Dioxide (CO<sub>2</sub>) Systems Used in Beverage

Dispensing Applications," of Chapter 53, "Compressed Gases," of the 2015 International Fire

Code is amended to read as follows:

"5307.5.2 Emergency alarm system. An emergency alarm system shall comply with all of the following:

- 1. Continuous gas detection shall be provided to monitor areas where carbon dioxide can accumulate.
- 2. The threshold for activation of an alarm shall not exceed 5,000 parts per million  $(9,000 \text{ mg/m}^3)$ .

- 3. Activation of the emergency alarm system shall initiate a local alarm within the room or area in which the system is installed <u>and shall be electrically supervised and monitored by</u> <u>an approved supervising station or shall initiate an audible and visual signal at a constantly attended on-site location.</u>"
  - 253. Subsection 5601.1, "Scope," of Section 5601, "General," of Chapter 56,

"Explosives and Fireworks," of the 2015 International Fire Code is amended to read as follows:

"5601.1 Scope. The provisions of this chapter shall govern the possession, manufacture, storage, handling, <u>transportation</u>, 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 <u>transportation and</u> 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 which in the aggregate contain less than 50 pounds (23 kg) of *explosive materials*.
- 7. The possession, storage, <u>transportation</u> 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."
- 254. Paragraph 5601.1.3, "Fireworks," of Subsection 5601.1, "Scope," of Section

5601, "General," of Chapter 56, "Explosives and Fireworks," of the 2015 International Fire Code

is amended to read as follows:

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

#### **Exceptions:**

- 1. <u>The display, storage, transportation</u> [Storage] and handling of fireworks when <u>approved</u> 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 <u>approved</u> 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 such fireworks comply with CPSC 16 CFR, Parts 1500 and 1507, and DOTn 49 CFR, Parts 100-185, for consumer fireworks.]"
- 255. Section 5608, "Fireworks Display," of Chapter 56, "Explosives and Fireworks,"

of the 2015 International Fire Code is amended to read as follows:

#### "SECTION 5608 FIREWORKS DISPLAY <u>AND PYROTECHNIC</u> <u>SPECIAL EFFECTS MATERIAL</u>

**5608.1 General.** [Outdoor fireworks displays, use of pyrotechnics before a proximate audience] The display, transportation and temporary storage of fireworks, including proximate audience displays and pyrotechnic special effects in motion picture, television, theatrical, and group entertainment productions, shall be in accordance [comply] with Section[s] <u>5608</u>, [<u>5608.2</u> through <u>5608.10 and</u>] 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.

**5608.2** 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 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 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. <u>A north arrow.</u>
- 6. Likely wind direction.
- 7. The location of significant roadways and utilities including access and control points.
- 8. <u>Traffic plans indicating the flow of vehicles into and out of the site before and after the display.</u>
- 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.

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- 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.
- <u>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.</u>
- 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. The permit a[A]pplication[s] 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] be made not less than 15 days prior to the scheduled date of the display. A rush fee of \$622.00 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 permitee'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 material safety data sheet (MSDS) 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;
- <u>2.</u> <u>Is a fugitive from justice;</u>
- <u>3.</u> Is under a felony indictment;
- <u>4.</u> <u>Has been finally convicted of a felony offense within the 5-year period immediately preceding the filing of the application;</u>
- 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. <u>Held a permit issued under this chapter which was revoked within the 1-year</u> 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. <u>Submits an application which indicates that the proposed display will not comply</u> with the provisions of this chapter; or
- 9. <u>Proposes a display which will create an unreasonable risk of injury to life or</u> 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.

**5608.4 Clearance.** Spectators, spectator parking areas, and *dwellings*, 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 *dwellings*, buildings and structures with the approval of the building *owner* and the *fire code official*.

**5608.5 Storage, <u>use and handling</u> of fireworks** [at display site]. [The s]Storage, <u>use and handling</u> of fireworks [at the display site] shall <u>be in accordance</u> [comply] with [the requirements of this s]Sections 5604 and 5608, Chapter 2154 of the *Texas Occupations Code* and 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** <u>Prohibition</u> [Supervision and weather protection]. It shall be unlawful for any person to possess, use, manufacture, sell, offer for sale, give away, transport or discharge [Beginning as soon as] fireworks of any description [have been delivered to the display site, they shall not be left unattended].

Exception: The use of fireworks for display is allowed as set forth in Section 5608.

**5608.5.2** <u>Display requirements.</u> [Weather protection]. Fireworks <u>displays</u> shall be <u>in</u> accordance with Sections 5608.5.2.1 through 5608.5.2.9.7.9. Only Division 1.4G fireworks (class C common) and Division 1.3G fireworks (special fireworks) are allowed to be used. When Division 1.3G fireworks are used, see Section 5604 [kept dry after delivery to the display site].

**5608.5.2.1 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.

**5608.5.2.2 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.

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5608.5.2.3 Mortars for aerial shell displays. Mortars for aerial shell displays shall be in accordance with Sections 5608.5.2.3.1 through 5608.5.2.3.12.

**5608.5.2.3.1 Site criteria.** Mortars for aerial displays shall be separated from spectator viewing areas, vehicles and buildings as set forth in Table 5608.5.2.3.

**Exception:** The *fire code official* is authorized to modify separation distance requirements based on characteristics of specific sites.

The designated landing area shall be an *approved* large, clear, open area. Spectators, vehicles and combustible materials shall not be allowed within the designated landing area. The designated landing area shall not be within 100 feet (30 480 mm) of tents, canopies and membrane structures.

**5608.5.2.3.2 Construction.** Mortars shall be *approved* for use with the aerial shells to be fired. Mortars shall be constructed of heavy cardboard, paper or metal other than cast iron.

5608.5.2.3.3 Inspection. Prior to placement, mortars shall be inspected for defects such as dents, bent ends, damaged interiors and damaged plugs. Mortars found to be defective shall not be used.

**5608.5.2.3.4 Positioning.** Mortars shall be positioned so that aerial shells are directed over the designated landing area and away from ground pieces. Mortars shall not be angled toward spectator viewing areas.

The trajectory of aerial shells shall be arranged such that a minimum clearance of 25 feet (7620 mm) is maintained from potential obstructions.

Seamed metal mortars shall be placed such that the seam of a mortar faces to the side rather than to the top or bottom.

**5608.5.2.3.5 Securing.** Mortars shall be buried to a depth of not less than two-thirds of their length, either in the ground or in aboveground troughs or drums. In soft ground, wood not less than 2 inches (50.8 mm) nominal thickness or rock slabs shall be placed beneath mortars which will be used more than once to prevent their sinking or being driven into the ground during firing.

**Exception:** Approved, securely positioned mortar racks are allowed for the firing of single-break shells 6 inches (152 mm) or less in diameter.

5608.5.2.3.6 Mortar separation. Mortars that are buried in the ground, in troughs or in drums shall be separated from adjacent mortars by a distance equal to or greater than the diameter of the mortar.

**Exception:** For electrically fired displays, or displays where all shells are loaded into mortars prior to the show, there is no requirement for separation of shells according to size or their designation as salutes.

**5608.5.2.3.7 Moisture protection.** In damp ground, a weather-resistant bag shall be placed under the bottoms of mortars prior to placement in the ground to protect mortars from moisture. Weather-resistant bags shall be placed over the open end of mortars in damp weather to keep moisture from accumulating on the inside surface of mortars.

5608.5.2.3.8 Ground burst protection. Sand bags, dirt boxes or other suitable protection shall be placed around mortars on the up-range side to protect the operator from ground bursts.

5608.5.2.3.9 Convolute and spiral wound paper mortars. Paper mortars constructed of convolute wound paper shall be *approved* for the size aerial shells being discharged having a maximum double break.

Spiral wound paper mortars shall not be used for greater than 3-inch (76.2 mm) diameter aerial shells with a maximum double break.

5608.5.2.3.10 Grouping mortars. Mortars of the same diameter, which are to be reloaded during a display, shall be grouped together such that various sizes are not intermixed. Groups shall be separated.

5608.5.2.3.11 Loose gravel and rocks. Loose gravel, rocks and other loose solid objects shall be removed from the area around mortars to prevent such materials from being thrown from ground bursts during firing.

**5608.5.2.3.12 Cleaning tool.** When mortars are to be fired more than once during a display, a cleaning tool shall be available for the cleaning of debris from mortars as necessary. For metal mortars, the tool shall be nonsparking.

MORTAR DIAMETER (INCHES)	MINIMUM SEPARATION FROM SPECTATOR VIEWING AREAS, VEHICLES AND BUILDINGS (feet)
X25.4 for mm	<u>X 0.3048 for m</u>
less than 3	<u>140</u>
3	210
<u>4</u>	<u>280</u>
<u>5</u>	<u>350</u>
<u>6</u>	420
7	490

### TABLE 5608.5.2.3 MINIMUM MORTAR SEPARATION DISTANCES

<u>8</u>	560
<u>10</u>	<u>700</u>
12	<u>840</u>
greater than 12	Approved

5608.5.2.4 Ground pieces. Ground pieces shall be in accordance with Sections 5608.5.2.4.1 through 5608.5.2.4.3.

**5608.5.2.4.1 Location.** 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.

5608.5.2.4.2 Combustibles. The area beneath ground pieces shall be free of dry grass and combustibles.

5608.5.2.4.3 Securing. Poles for ground pieces shall be securely placed and braced.

5608.5.2.5 Electrical firing units. Electrical firing units shall be in accordance with Sections 5608.5.2.5.1 through 5608.5.2.5.6.

**5608.5.2.5.1 Wiring.** Electrical wiring associated with an electrical firing unit shall be prevented from contacting metal objects in contact with the ground.

**5608.5.2.5.2 Power supply.** AC-powered electrical firing units shall be isolated from the power source using an isolation transformer.

5608.5.2.5.3 Security. Electrical firing units shall require a key-operated switch or other similar device to prevent unauthorized operation.

**Exception:** Hand-held electrical firing units connected to fireworks only during a display.

5608.5.2.5.4 Manually activated firing units. Manually activated electrical firing units shall require two or more distinct actions to apply electric current to an electric match.

5608.5.2.5.5 Automatic-firing units. Automatic-sequencing-type electrical firing units shall include a momentary contact switch which shall be held to cause

application of current to an electric match and which will immediately disconnect current to all electric matches upon release.

**5608.5.2.5.6 Testing of firing circuits.** The pyrotechnic operator shall ensure that personnel are kept at a safe distance from fireworks which are connected to electrical firing units during testing. Electrical firing units with integral test circuits shall be designed to limit the maximum current output during a test to 0.05 ampere or to 20 percent of the no-fire current of electric matches, whichever is less. Multitesters shall not be used for testing unless the maximum current output has been measured and determined not to exceed the current output limits for integral test circuits.

5608.5.2.6 Supervision. Beginning as soon as fireworks have been delivered to the display site, they shall not be left unattended.

**5608.5.2.7 Weather protection.** Fireworks shall be kept dry after delivery to the display site.

5608.5.2.8 Display operation. Display operation shall be in accordance with Sections 5608.5.2.8.1 through 5608.5.2.8.6.7.

**5608.5.2.8.1 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*.

**5608.5.2.8.2 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.

**5608.5.2.8.3 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.

**5608.5.2.8.4 Illumination.** Display operators shall use only flashlights or electric lighting for illumination.

5608.5.2.8.5 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.

5608.5.2.8.6 Aerial shells. Aerial shell operations shall be in accordance with Sections 5608.5.2.9.7.1 through 5608.5.2.9.7.9.

**<u>5608.5.2.8.6.1 Ready boxes.</u>** Ready boxes shall be located not less than 25 feet (7620 mm) in an upwind direction from mortars.

**5608.5.2.8.6.2** Transporting and loading. 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 lowered into mortars.

**5608.5.2.8.6.3 Proper fit.** Aerial shells shall be checked for proper fit in mortars prior to discharge. The pyrotechnic operator shall inspect all aerial shells to be certain that they are properly seated in mortars prior to firing. Aerial shells that do not fit properly shall not be fired.

**5608.5.2.8.6.4 Safety cap.** The safety cap protecting a fuse shall not be removed until immediately before an aerial shell is to be fired.

**5608.5.2.8.6.5 Ignition.** Aerial shells shall be ignited by lighting the tips of fuses with a fuse, torch, portfire, electrical ignition source or similar device. Operators shall not place any part of their bodies over the throat of a mortar. All aerial shells greater than 6 inches (152 mm) in diameter shall be fired using electrical ignition, or other means of remote ignition that place the shooter and assistants at least 75 feet (23 m) away from the mortar or behind a sturdy barricade at the time of ignition of the lift charge.

**Exception:** Shells that are nominally 7 inches (178 mm) or 8 inches (203 mm) in diameter shall be permitted to be ignited manually provided that the mortars are buried at least three-quarters of their length in the ground and the shooter has been provided with alternative means of protection.

**5608.5.2.8.6.6 Trajectory.** The first aerial shell fired shall be carefully observed to determine that its trajectory will carry it into the intended firing range and that the aerial shell will function over and debris will drop into the designated landing area. Mortars shall be reangled or reset if necessary at any time during the display to properly maintain trajectories over the designated landing area.

**5608.5.2.8.6.7 Record.** The pyrotechnic operator shall keep a record of aerial shells that fail to ignite or fail to function.

[5608.5.4 Sorting and separation. After delivery to the display site and prior to the fireworks display, all shells shall be separated according to size and their designation as salutes.

**Exception:** For electrically fired displays, or displays where all shells are loaded into mortars prior to the show, there is no requirement for separation of shells according to size or their designation as salutes

5608.5.5 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 size and their designation as salutes.

**Exception:** For electrically fired displays, or displays where all shells are loaded into mortars prior to the show, there is no requirement for separation of shells according to size, their designation as salutes, or for the use of ready boxes.]

**5608.6** <u>Pyrotechnic special effects material</u> [Installation of mortars]. 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 5608.6.1 through 5608.6.7.3. Permanent storage of pyrotechnic special effects material shall be in accordance with Section 5604 [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. Under no circumstances shall mortars 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</u>].

**5608.6.1 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.

**5608.6.2 Construction of magazines.** Magazines used for the storage of pyrotechnic special effects material shall be constructed in accordance with Section 5604.6.

5608.6.3 Storage. Storage of fireworks and pyrotechnic special effects material shall be in accordance with Sections 5608.6.3.1 through 5608.6.3.6.

**5608.6.3.1 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.

5608.6.3.2 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.

5608.6.3.3 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.

**5608.6.3.4 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.

5608.6.3.5 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.

**5608.6.3.6 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.

**5608.6.4 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.

5608.6.5 Housekeeping. Housekeeping shall be in accordance with Section 5604.8.1.

**5608.6.6 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*.

**5608.6.7 Use of pyrotechnic special effects material.** Use of pyrotechnic special effects material shall be in accordance with Sections 5608.6.7.1 through 5608.6.7.3.

### 5608.6.7.1 General precautions.

**5608.6.7.1.1 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.

**5608.6.7.1.2 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.

**5608.6.7.1.3 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.

**5608.6.7.1.4 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.

**5608.6.7.1.5 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.

5608.6.7.2 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.

**5608.6.7.3** Surplus materials. Surplus materials shall be properly stored until they can be disposed of in a safe manner.

**5608.7** <u>Standby personnel and equipment</u> [Handling]. 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. [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.]</u>

**5608.8 Fireworks display supervision.** Whenever in the opinion of the *fire code official* or the <u>pyrotechnic</u> operator a hazardous condition exists, <u>such as a lack of crowd control or the crowd</u> 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 sire 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 dowsed 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."

256. Subsection 5701.4, "Permits," of Section 5701, "General," of Chapter 57,

"Flammable and Combustible Liquids," of the 2015 International Fire Code is amended to read

as follows:

"5701.4 Permits. Permits shall be required as set forth in Sections 105.6, [and] 105.7, and 5706."

257. Section 5701, "General," of Chapter 57, "Flammable and Combustible Liquids,"

of the 2015 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. Material safety data sheets of all flammable or combustible liquid involved.
- 3. Room construction, dimensions, ventilation, sprinkler design, etc.
- 4. Secondary containment.

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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*."

258. Subsection 5703.2, "Fire Protection," of Section 5703, "General Requirements,"

of Chapter 57, "Flammable and Combustible Liquids," of the 2015 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."

259. Subsection 5703.4, "Spill Control and Secondary Containment," of Section 5703,

"General Requirements," of Chapter 57, "Flammable and Combustible Liquids," of the 2015

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 <u>flammable and combustible</u> [Class I, II and III-A] liquids shall be provided with spill control and secondary containment in accordance with Section 5004.2."

260. Subsection 5703.6, "Piping Systems," of Section 5703, "General Requirements,"

of Chapter 57, "Flammable and Combustible Liquids," of the 2015 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. <u>An approved method of secondary containment shall be provided for underground tank and piping systems.</u>"

261. 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 the 2015

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 IIA 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 drainage path of Class I or II liquids do not require emergency relief venting.
- [2. Emergency vents on protected above ground tanks complying with UL 2085 containing Class II or IIIA liquids are allowed to discharge inside the building.]"
- 262. 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 the 2015 International Fire Code is

amended to read as follows:

**"5704.2.7.5.8 Overfill prevention.** An approved means or method in accordance with 5704.2.9.7.6 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.

[Exception: Outside above ground tanks with a capacity of 1,320 gallons (5000 L) or less.]"

263. 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 the 2015

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 <u>through 5704.2.9.5.3</u> [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 5704.2.9.7.7.

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
- <u>4.</u> <u>Tanks shall be connected to fuel-burning equipment, including generators, utilizing an *approved* closed piping system.</u>

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."

264. Paragraph 5704.2.11, "Underground Tanks," of Subsection 5704.2, "Tank Storage,"

of Section 5704, "Storage," of Chapter 57, "Flammable and Combustible Liquids," of the 2015

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[2]."

265. Subparagraph 5704.2.11.2, "Depth and Cover," of Paragraph 5704.2.11,

"Underground Tanks," of Subsection 5704.2, "Tank Storage," of Section 5704, "Storage," of

Chapter 57, "Flammable and Combustible Liquids," of the 2015 International Fire Code is

amended to read as follows:

"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 <u>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.</u>

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

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recommendations.

Nonmetallic underground tanks shall be installed in accordance with the manufacturer's instructions. The minimum depth of cover shall be as specified above."

266. Subparagraph 5704.2.11.4, "Leak Prevention," of Paragraph 5704.2.11,

"Underground Tanks," of Subsection 5704.2, "Tank Storage," of Section 5704, "Storage," of

Chapter 57, "Flammable and Combustible Liquids," of the 2015 International Fire Code is

amended to read as follows:

**"5704.2.11.4 Leak prevention.** Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 <u>through [and]</u> 5704.2.11.4.<u>4[2]</u>.

**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 <u>and as specified in Section</u> <u>5704.2.11.4.3</u>.

**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."

267. 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 the 2015 International Fire Code is amended to read as follows:

"**5704.2.12.1 Acceptance testing.** Prior to being 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."

268. Item 5704.2.13.1.4, "Tanks Abandoned in Place," of Subparagraph 304.2.13.1,

"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 the 2015 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."

269. 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 the 2015 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-inchdiameter (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. <u>Removal of tanks shall be in the presence of the fire code official.</u>
- 270. 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 the 2015 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. <u>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.</u>"

271. Subparagraph 5706.5.4.3, "Aircraft Fueling," of 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 the 2015 International Fire Code is amended to read as follows:

**"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. <u>Mobile fuel dispensing vehicles are prohibited from dispensing flammable or combustible liquids into the fuel tanks of aircraft on non-airport property.</u>

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 chief, *standby personnel* shall be required. Charges for *standby personnel* shall be as normally calculated by the fire department."

272. Subparagraph 5706.5.4.5, "Commercial, Industrial, Governmental or

Manufacturing," of 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 the 2015 International

Fire Code is amended to read as follows:

**"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 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 which 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 upon 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 accessible 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 countback switch, to limit the amount of a single fueling operation to a maximum of 500 gallons (1893 L) before resetting the limit switch.

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

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- 14. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak or spill. Training records shall be maintained by the dispensing company and shall be made available to the *fire code official* upon request.
- 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.

- 26. Requests for temporary dispensing of Class I flammable liquids will be reviewed on an individual basis. If *approved* by the fire chief, a mobile fueling permit will be required for the dispensing of Class I flammable liquids. The permit will specify the location, dates and times which have been *approved* for the temporary operation. Additionally, the fire chief may require standby personnel and a standby fire engine with fire personnel during the temporary operation. Charges for standby personnel shall be as normally calculated by the fire department.
- 27. 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. The fire department shall inspect each vehicle 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."
- 273. Subsection 5804.2, "Outdoor Storage," of Section 5804, "Storage," of Chapter 58,

"Flammable Gases and Flammable Cryogenic Fluids," of the 2015 International Fire Code is

amended by adding a new Paragraph 5804.2.1, "Access," to read as follows:

**"5804.2.1 Access.** Outdoor storage of flammable gas shall be provided with fire department access and fire hydrant availability in accordance with Chapter 5."

274. Subsection 5904.2, "Outdoor Storage," of Section 5904, "Storage," of Chapter 59,

"Flammable Solids," of the 2015 International Fire Code is amended by adding a new Paragraph

5904.2.3, "Access," to read as follows:

"**5904.2.3** Access. Outdoor storage of flammable solids shall be provided with fire department access and fire hydrant availability in accordance with Chapter 5."

275. Subsection 5906.3, "Storage of Pigs, Ingots and Billets," of Section 5906,

"Magnesium," of Chapter 59, "Flammable Solids," of the 2015 International Fire Code is

amended by adding a new Paragraph 5906.3.3, "Access," to read as follows:

**"5906.3.3 Access.** Outdoor storage of magnesium pigs, ingots and billets shall be provided with fire department access and fire hydrant availability in accordance with Chapter 5."

276. Subparagraph 6004.2.2.9, "Automatic Fire Detection System—Highly Toxic Compressed Gases," of Paragraph 6004.2.2, "General Indoor Requirements," of Subsection 6004.2, "Indoor Storage and Use," of Section 6004, "Highly Toxic and Toxic Compressed Gases," of Chapter 60, "Highly Toxic and Toxic Materials," of the 2015 International Fire Code is amended to read as follows:

"6004.2.2.9 Automatic fire detection system—highly toxic compressed gases. An *approved* <u>supervised</u> automatic fire detection system shall be installed in rooms or areas where highly toxic *compressed* gases are stored or used. Activation of the detection system shall sound a local alarm. The fire detection system shall comply with Section 907."

277. Section 6101, "General," of Chapter 61, "Liquefied Petroleum Gases," of the

2015 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 105.6 and 105.7.

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 permitee completes the permitted activity.
- 3. When the permitee abandons the permitted activity.
- 4. If the permitee 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 [(7570-L)] in water capacity or the aggregate water capacity of LP-gas containers is 2,000 [more than 4,000] gallons (7570 L) or more [(15 140 L)], 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. Material 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."

278. 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 the 2015 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."

279. 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 the 2015 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."

280. Subsection 6104.2, "Maximum Capacity Within Established Limits," of Section

6104, "Location of LP-Gas Containers," of Chapter 61, "Liquefied Petroleum Gases," of the

2015 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) [(see Section 3 of the Sample Legislation for Adoption of the *International Fire Code* on page xxi)].

### 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 and 6104.3.3, LP-gas containers are not permitted in residential areas."
- 281. Subsection 6104.3, "Container Location," of Section 6104, "Location of LP-Gas

Containers," of Chapter 61, "Liquefied Petroleum Gases," of the 2015 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."

282. Subsection 6107.4, "Protecting Containers From Vehicles," of Section 6107,

"Safety Precautions and Devices," of Chapter 61, "Liquefied Petroleum Gases," of the 2015

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 <u>Section 312</u> [NFPA 58]."

283. 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 the 2015 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.]"

284. Subsection 6304.2, "Outdoor Storage," of Section 6304, "Storage," of Chapter 63,

"Oxidizers, Oxidizing Gases and Oxidizing Cryogenic Fluids" of the 2015 International Fire

Code is amended by adding a new Paragraph 6304.2.4, "Access," to read as follows:

"6304.2.4 Access. Outdoor storage for oxidizers shall be provided with fire department access and fire hydrant availability in accordance with Chapter 5."

285. The CGR Standard of Chapter 80, "Referenced Standards," of the 2015

International Fire Code is amended to read as follows:

"CGR	Coast Guard Regulations c/o Superintendent of Documents U.S. Government Printing Office Washington, DC 20402-9325	
Standard reference number	Title	Referenced in code section number
46 CFR Parts 30, 35 & 39 <u>2001</u> [	, 32, <del>1999</del> ] Shipping	

286. Appendix A and Appendix M of the 2015 International Fire Code are not adopted.

287. Appendices C, E, F, G, H, I, and J of the 2015 International Fire Code are adopted.

288. Appendix B, "Fire-Flow Requirements for Buildings," of the 2015 International Fire Code is adopted with the following amendment:

A. Footnote a of Table B105.2, "Required Fire-Flow for Buildings Other Than Oneand 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 <u>1,500</u> [<del>1,000</del>] gallons per minute."

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289. Appendix D, "Fire Apparatus Access Roads," of the 2015 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 department apparatus weighing at least <u>81,500</u> [75,000] pounds (<u>36 968</u> [<del>34 050</del>] 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 chief.]"

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 <u>Section N104</u>, "Limited Access Gates," of Appendix N. [all of the following criteria:

- 1. The minimum gate width shall be 20 feet (6096 mm).
- 2. Gates shall be of the swinging or sliding 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. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location.

- 7. Locking device specifications shall be submitted for approval by the fire code official.
- 8. Electric gate operators, where provided, shall be listed in accordance with UL 325.
- 9. 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. <u>See Section 503.3.</u> [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 apparatus access roads 20 to 26 feet wide (6096 to 7925 mm) shall be posted on both sides as a fire lane.

**D103.6.2 Roads more than 26 feet in width.** Fire apparatus access roads more than 26 feet wide (7925 mm) to 32 feet wide (9754 mm) shall be posted on one side of the road as a fire lane.]"

290. Appendix K, "Construction Requirements for Existing Ambulatory Care

Facilities," of the 2015 International Fire Code is not adopted.

291. Appendix L, "Requirements for Fire Fighter Air Replenishment Systems," of the

2015 International Fire Code is not adopted.

292. The 2015 International Fire Code is amended by adding a new Appendix N,

"Miscellaneous Dallas Fire-Rescue Department Standards," to read as follows:

### "APPENDIX N MISCELLANEOUS DALLAS FIRE-RESCUE DEPARTMENT STANDARDS

#### SECTION N101 GENERAL

**N101.1 General.** The following standards of the Dallas Fire-Rescue Department are codified as a supplement to the *Dallas Fire Code*.
#### **SECTION N102**

#### SPECIFICATIONS FOR SECURING UNSECURED VACANT STRUCTURES

**N102.1 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*.

**N102.2 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.

**N102.3 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 L102.4.

**N102.4 Specifications and materials.** Specifications and materials are outlined in this section (see attached diagrams and specifications).

**N102.4.1 Specifications and materials for securing windows**. The following specifications and materials are to be used in securing windows:

- 1. <sup>1</sup>/<sub>2</sub>-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.<sup>a</sup>
- 3. 2 inch (50.8 mm) steel washer.
- 4.  $\frac{1}{4}$ -inch (6.4 mm) steel plate 6 inch square (0.00387 m<sup>2</sup>) 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.<sup>b</sup>
- 6. <sup>1</sup>/<sub>2</sub>-inch (12.7 mm) carriage bolt and <sup>1</sup>/<sub>2</sub>-inch (12.7 mm) lock nut.
  - a. If applicable, 1<sup>1</sup>/<sub>2</sub>-inch (38.1 mm) masonry nails or # 8 1<sup>1</sup>/<sub>4</sub>-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)



EXTERIOR VIEW DIAGRAM NO.1A



Dotted line denotes hidden view



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**N102.4.2 Specifications and materials for securing doors**. The following specifications and materials are to be used in securing doors:

- 1. <sup>1</sup>/<sub>2</sub>-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.<sup>a</sup>
- 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).



**N102.4.3 Specifications and materials for securing oversized openings**. The following specifications and materials are to be used for securing oversized openings:

- 1. <sup>1</sup>/<sub>2</sub>-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.<sup>a</sup>
- 3. 8 penny cement coated, hot dipped zinc or galvanized nails.<sup>b</sup>
  - 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, 1<sup>1</sup>/<sub>2</sub>-inch (38.1 mm) masonry nails or #8 1<sup>1</sup>/<sub>4</sub>-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).



Dotted line denotes hidden view

**N102.4.4 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 chief, 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. Three strands of barb wire or razor wire along top of fence and gate.
- 5. One strand of 7-gauge spring wire tightly woven and secured along the base of the fence.
- 6. Fence shall secure the perimeter of the structure(s) to prevent unauthorized entry.

#### SECTION N103 GENERAL FIRE SAFETY REQUIREMENTS FOR HIGH-RISE BUILDINGS

**N 03.1 Fire safety plan.** The operator of a high-rise building is required to submit a fire safety plan to the fire chief for review and approval. Copies of the fire safety plan shall be distributed to all tenants and employees of the building.

**N103.2 Fire safety personnel assignments.** The following fire safety personnel are required in high-rise buildings:

N103.2.1 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.

N103.2.2 Fire warden. A fire warden shall be designated for each floor.

N103.2.2.1 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.

N103.2.2.2 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.

**N103.2.3 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.

**N103.3 Fire safety plan.** The following items shall be included in a high-rise building's fire safety plan:

### N103.3.1 Emergency phone numbers. The following phone numbers are required:

- 1. Fire/ambulance/police: 9-1-1.
- 2. Management and fire safety director.
- 3. Security.

**N103.3.2 Procedures.**<sup>a</sup> 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 chief.

N103.3.3 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 reentry onto other floors if smoke is encountered in the stairwell.

If stairwell re-entry is only available on every fifth floor, signs shall be posted indicating reentry points.

**N103.3.4 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.

**N103.4 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.

**N103.5 General requirements for high-rise buildings.** High-rise buildings shall meet the following requirements.

**N103.5.1Elevator 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 <sup>1</sup>/<sub>2</sub> 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.

**N103.5.2 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  $\frac{1}{2}$  inch (12.7 mm) high and on a contrasting background.

#### SECTION N104 LIMITED ACCESS GATES

**N104.1 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.

**N104.1.1 Submit building plans prior to installation.** 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.

**N104.1.2 Building permit required.** A building permit is required to install fencing over 6 feet (1828.8 mm) high.

N104.1.3 Electrical permit required. An electrical permit is required for all electrical work.

N104.1.4 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.

N104.2 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 an *approved* Dallas Fire-Rescue Department radio receiver and transmitter 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 chief, 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 six channel modular receiver having 400+ MHz frequency. Each digital channel module shall be preset to a specified digital code designated by the fire chief;
    - 2.1.2. Be equipped with one 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.

**N104.3 Weatherproof box required.** The manual release device as required in Item 4 of Section N104.2 shall be protected from weather and physical damage in a weatherproof box which is:

- 1. Red in color.
- 2. At least 5 inches high, 5 inches wide and 1<sup>1</sup>/<sub>2</sub> inches deep (127 mm high, 12.7 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 the Knox padlock that conforms to the Dallas Fire-Rescue Department Knox security key when used with the manual release device.

**N104.4 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 door knob 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.

**N104.5 Maintenance.** The gate opening systems shall be serviced on a regular basis and maintained in an *approved* operating condition.

- 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.

#### N104.6 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*.

#### N104.7 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.



PEDESTRIAN WALKWAY SECURITY GATES



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#### PEDESTRIAN WALKWAY SECURITY GATES

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#### PEDESTRIAN WALKWAY SECURITY GATES

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293. All chapters of the 2015 International Fire Code adopted by this ordinance are subchapters of Chapter 16 of the Dallas City Code, as amended.

294. All references in the 2015 International Fire Code to the building code, plumbing code, mechanical code, electrical code, residential code, existing building code, energy conservation code, and the fuel gas code refer, respectively to Chapters 53, 54, 55, 56, 57, 58, 59, and 60 of the Dallas City Code.

SECTION 2. Any errata corrections of the 2015 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 October 1, 2016, in accordance with the Charter of the City of Dallas, and it is accordingly so ordained.

APPROVED AS TO FORM:

CHRISTOPHER D. BOWERS, Interim City Attorney

By\_

Assistant City Attorney

Passed\_

JUN 222016

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### **PROOF OF PUBLICATION – LEGAL ADVERTISING**

The legal advertisement required for the noted ordinance was published in the Dallas Morning News, the official newspaper of the city, as required by law, and the Dallas City Charter, Chapter XVIII, Section 7.

DATE ADOPTED BY CITY COUNC	JUN <b>2 2</b> 2016
ORDINANCE NUMBER	30135
DATE PUBLISHED	JUN 2 5 2016

ATTESTED BY:

Case a. Lies