

ORDINANCE NO. \_\_\_\_\_

An ordinance amending CHAPTER 16, “DALLAS FIRE CODE,” of the Dallas City Code, as amended; adopting with certain changes the 2006 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 2006 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 v-vi, “Ordinance,” are deleted.
2. Subsection 101.1, “Title,” of Section 101, “General,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

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

3. Section 101, “General,” of Chapter 1, “Administration,” of the 2006 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 102.4, “Application of Building Code,” of Section 102, “Applicability,” of Chapter 1, “Administration,” of the 2006 International Fire Code is retitled as Subsection 102.4, “Application of Other Codes,” and amended to read as follows:

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

5. Subsection 102.6, “Referenced Codes and Standards,” of Section 102, “Applicability,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

**“102.6 Referenced codes and standards.** The codes and standards referenced in this code shall be those that are listed in Chapter 45 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. 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 Building Code, the Dallas Plumbing Code, the Dallas Energy Conservation Code, the Dallas Fuel Gas Code, the Dallas Existing Building Code, and the Dallas One- and Two-Family Residential Code, as amended. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply.”

6. Section 103, “Department of Fire Prevention,” of Chapter 1, “Administration,” of the 2006 International Fire Code is retitled as Section 103, “Division of Fire Prevention.”

7. Subsection 103.1, “General,” of Section 103, “Division of Fire Prevention,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

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

8. Subsection 103.2, “Appointment,” of Section 103, “Division of Fire Prevention,” of Chapter 1, “Administration,” of the 2006 International Fire Code is retitled as Subsection 103.2, “Appointment of Fire Marshal,” and amended to read as follows:

**“103.2 Appointment of fire marshal.** The fire chief is authorized to designate a member of the fire department to exercise the powers and perform the duties of fire marshal (fire code official) as set forth in this code. [~~The fire code official shall be appointed by the chief appointing authority of the jurisdiction;~~] and the fire 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. ”

9. Section 103, “Division of Fire Prevention,” of Chapter 1, “Administration,” of the 2006 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.”

10. Subsection 104.1, “General,” of Section 104, “General Authority and Responsibilities,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

**“104.1 General.** The fire chief ~~[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. Under the fire chief’s direction, the fire department is authorized to enforce all state laws, city ordinances and executive orders of the jurisdiction.

**104.1.1 Stopping uses, evacuation.** The fire chief is authorized to order an operation or use stopped or the evacuation of any premises, building or portion thereof which does not have a valid certificate of occupancy in accordance with Section 102.3 and Section 112.”

11. Subsection 104.2, “Applications and Permits,” of Section 104, “General Authority and Responsibilities,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

**“104.2 Applications and permits.** The fire chief ~~[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.”

12. Paragraph 104.6.1, “Approvals,” of Subsection 104.6, “Official Records,” of Section 104, “General Authority and Responsibilities,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

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

13. Subsection 104.10, “Fire Investigations,” of Section 104, “General Authority and Responsibilities,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

**“104.10 Fire investigations.** The fire ~~[code official, the fire]~~ department is authorized [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.”

14. Subsection 104.11, “Authority at Fires and Other Emergencies,” of Section 104, “General Authority and Responsibilities,” of Chapter 1, “Administration,” of the 2006 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.”

15. Section 104, “General Authority and Responsibilities,” of Chapter 1, “Administration,” of the 2006 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."

16. Section 105, "Permits," of Chapter 1, "Administration," of the 2006 International Fire Code is retitled as Section 105, "Permits and Fees."

17. Paragraph 105.1.2, "Types of Permits," of Subsection 105.1, "General," of Section 105, "Permits and Fees," of Chapter 1, "Administration," of the 2006 International Fire Code is deleted.

18. Paragraph 105.2.2, "Inspection Authorized," of Subsection 105.2, "Application," of Section 105, "Permits and Fees," of Chapter 1, "Administration," of the 2006 International Fire Code is amended to read as follows:

**"105.2.2 Inspection authorized.** Before a [~~new operational~~] permit is approved, the fire code official is authorized to and shall inspect the receptacles, vehicles, buildings,

devices, limited access gates, premises, storage spaces or areas to be used to determine compliance with this code or any operational constraints required.”

19. Paragraph 105.2.3, “Time Limitation of Application,” of Subsection 105.2, “Application,” of Section 105, “Permits and Fees,” of Chapter 1, “Administration,” of the 2006 International Fire Code is deleted.

20. Paragraph 105.2.4, “Action on Application,” of Subsection 105.2, “Application,” of Section 105, “Permits and Fees,” of Chapter 1, “Administration,” of the 2006 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 chief [~~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 therefore as soon as practicable.”

21. Subsection 105.3, “Conditions of a Permit,” of Section 105, “Permits and Fees,” of Chapter 1, “Administration,” of the 2006 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.”

22. Paragraph 105.3.1, “Expiration,” of Subsection 105.3, “Conditions of a Permit,” of Section 105, “Permits and Fees,” of Chapter 1, “Administration,” of the 2006 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.”

23. Paragraph 105.3.4, “Conditional Permits,” of Subsection 105.3, “Conditions of a Permit,” of Section 105, “Permits and Fees,” of Chapter 1, “Administration,” of the 2006 International Fire Code is deleted.

24. Paragraph 105.3.6, “Compliance With Code,” of Subsection 105.3, “Conditions of a Permit,” of Section 105, “Permits and Fees,” of Chapter 1, “Administration,” of the 2006 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.]”~~

25. Subsection 105.6, “Required Operational Permits,” of Section 105, “Permits and Fees,” of Chapter 1, “Administration,” of the 2006 International Fire Code is retitled as Subsection 105.6, “Required Permits,” and 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 105.6.51~~[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.** An operational permit is required to use a Group H or Group S occupancy for aircraft servicing or repair and aircraft fuel servicing vehicles. Additional permits required by other sections of this code include, but are not limited to, hot work, hazardous materials and flammable or combustible finishes.]~~

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

~~**105.6.5 Cellulose nitrate film.** An operational permit is required to store, handle or use cellulose nitrate film in a Group A occupancy.~~

~~**105.6.6 Combustible dust-producing operations.** An operational permit is required to operate a grain elevator, flour starch mill, feed mill, or a plant pulverizing aluminum, coal, cocoa, magnesium, spices or sugar, or other operations producing combustible dusts as defined in Chapter 2.~~

~~**105.6.7 Combustible fibers.** An 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.~~

~~**105.6.8 Compressed gases.** An operational permit is required for the storage, use or handling at normal temperature and pressure (NTP) of compressed gases in excess of the amounts listed in Table 105.6.8.~~

~~**Exception:** Vehicles equipped for and using compressed gas as a fuel for propelling the vehicle.~~  
TABLE 105.6.9

**PERMIT AMOUNTS FOR COMPRESSED GASES**

<b>TYPE OF GAS</b>	<b>AMOUNT (cubic feet at NTP)</b>
Corrosive	200
Flammable (except cryogenic fluids and liquefied petroleum gases)	200
Highly toxic	Any Amount
Inert and simple asphyxiant	6,000
Oxidizing (including oxygen)	504
Pyrophoric	Any Amount
Toxic	Any Amount

For SI: 1 cubic foot = 0.02832 m<sup>3</sup>.

**~~105.6.9 Covered 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.~~

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

**~~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.~~

**TABLE 105.6.11  
PERMIT AMOUNTS FOR CRYOGENIC FLUIDS**

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

For SI: 1 gallon = 3.785 L.]

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

**~~105.6.12 Dry cleaning plants.~~** ~~An operational permit is required to engage in the business of dry cleaning or to change to a more hazardous cleaning solvent used in existing dry cleaning equipment.~~

**~~105.6.13 Exhibits and trade shows.~~** ~~An operational permit is required to operate exhibits and trade shows.]~~

**105.6.14 Explosives.** A[n-operational] permit is required for the manufacture, transportation, storage, handling, sale or use of any quantity of explosive, explosive material, fireworks, or pyrotechnic special effects within the scope of Chapter 33.

**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 3306.

**~~105.6.15 Fire hydrants and valves.~~** ~~An operational permit is required to use or operate fire hydrants or valves intended for fire suppression purposes which 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.]~~

**105.6.16 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 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 remove Class I or Class 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.
5. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used. This includes tanks, lines, monitor wells and other appurtenances of the tank system.
6. To remove, abandon, or place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or combustible liquid tank. This includes tanks, lines, monitor wells and other appurtenances of the tank system.

7. To change the type of contents stored in a flammable or combustible liquid tank to a material which poses a greater hazard than that for which the tank was designed and constructed.
8. To manufacture, process, blend or refine flammable or combustible liquids.
9. 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. ~~[engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.]~~
10. ~~To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments.]~~

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

**105.6.18 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.

~~**105.6.19 Fumigation and thermal insecticidal fogging.** An operational permit is required to operate a business of fumigation or thermal insecticidal fogging and to maintain a room, vault or chamber in which a toxic or flammable fumigant is used.]~~

**105.6.20 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 105.6.20.

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

**105.6.22 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>).

**105.6.23 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 inside a structure.

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

3. Fixed-site hot work equipment such as welding booths.
4. Hot work conducted within a hazardous fire area.
5. Application of roof coverings with the use of an open-flame device.
- ~~6. 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.]~~

**105.6.24 Industrial ovens.** A~~[n-operational]~~ permit is required for operation of industrial ovens regulated by Chapter 21.

~~[105.6.25 Lumber yards and woodworking plants. An 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>).~~

~~105.6.26 Liquid or gas fueled vehicles or equipment in assembly buildings. An operational permit is required to display, operate or demonstrate liquid or gas fueled vehicles or equipment in assembly buildings.]~~

**105.6.27 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 serving occupancies in Group R-3.]~~

2. The use of [Operation of cargo tankers that transport] LP-gas for demonstration or portable cooking equipment. See Chapter 38.

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

**105.6.29 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.

**105.6.30 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.]~~

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

**105.6.30.2 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.

**105.6.31 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 hazardous fire area.

**105.6.32 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.

~~[105.6.33 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.]~~

~~105.6.34 Places of assembly. An operational permit is required to operate a place of assembly.]~~

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

~~[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.]~~

**105.6.36 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 33.

~~[105.6.37 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.]~~

**105.6.38 Refrigeration equipment.** An annual ~~[operational]~~ permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6.

~~[105.6.39 Repair garages and motor fuel-dispensing facilities. An operational permit is required for operation of repair garages and automotive, marine and fleet motor fuel-dispensing facilities.~~

~~105.6.40 Rooftop heliports. An operational permit is required for the operation of a rooftop heliport.]~~

**105.6.41 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 15.

**105.6.42 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.

**105.6.43 Temporary membrane structures, tents and canopies.** A[n-operational] permit is required to operate an air-supported temporary membrane structure or a tent having an area in excess of 399 [200] square feet (37 [19] m<sup>2</sup>), or a canopy in excess of 399 [400] square feet (37 m<sup>2</sup>).

**Exceptions:**

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

**105.6.44 Tire-rebuilding plants.** A[n-operational] permit is required for the operation and maintenance of a tire rebuilding plant.

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

~~[105.6.46 Wood products. An operational permit is required to store chips, hogged material, lumber or plywood in excess of 200 cubic feet (6 m<sup>3</sup>).]~~

**105.6.47 Acetylene generator.** A permit is required to operate an acetylene generator. See Chapter 26.

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

**105.6.49 Calcium carbide storage.** A permit is required to store more than 200 pounds of calcium carbide. See Chapter 26.

**105.6.50 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.

**105.6.51 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 34.

**105.6.52 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.

26. Paragraph 105.7.13, “Temporary Membrane Structures, Tents and Canopies,” of Subsection 105.7, “Required Construction Permits,” of Section 105, “Permits and Fees,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

**105.7.13 Temporary membrane structures, tents and canopies.** A construction permit is required to erect an air-supported temporary membrane structure or a tent having an area in excess of 399 [200] square feet (37 [19] m<sup>2</sup>), or a canopy in excess of 399 [400] square feet (37 m<sup>2</sup>).

**Exceptions:**

1. Tents used exclusively for recreational camping purposes.
2. Funeral tents and curtains or extensions attached thereto, when used for funeral services.
3. 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 m<sup>2</sup>).
  - 3.2. The aggregate area of multiple canopies placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m<sup>2</sup>) 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.

27. Section 105, "Permits and Fees," of Chapter 1, "Administration," of the 2006 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	\$150.00
2. Aerosol products, annual	\$150.00
3. Air curtain incinerator/pit burner	\$94.00
4. Amusement building	\$129.00
5. Calcium carbide storage, annual	\$150.00
6. Candle and open flames	\$55.00
7. Carnivals and fairs	\$108.00
8. Combustible storage (miscellaneous), annual	\$135.00
9. Commercial cooking fire-extinguishing system	\$160.00
9. Explosive/blasting	\$255.00
10. Fireworks/explosive storage	\$140.00
11. Fireworks/explosive transportation	\$170.00
12. Fireworks display (initial)	\$385.00
13. Fireworks display (subsequent)	\$185.00

14. Flammable and combustible liquids, annual	\$125.00
15. Floor finishing	\$125.00
16. Fruit and crop ripening, annual	\$125.00
17. Hazardous materials, annual	\$150.00
18. Hazardous production material (HPM), annual	\$132.00
19. High pile storage, annual	\$150.00
20. Industrial oven	\$135.00
21. Limited access gates	
(1 to 3 gates)	\$143.00
(4 to 7 gates)	\$203.00
(8 or more gates)	\$262.00
22. LP-gas storage/use	\$114.00
23. LP-gas demonstration/portable cooking	\$100.00
24. Magnesium, annual	\$125.00
25. Mobile fueling	
(site survey), annual	\$215.00
(vehicle inspection) annual	\$80.00
26. Open burning/recreational fires	\$150.00
27. Private fire hydrant and water supplies, annual	\$75.00
28. Refrigeration equipment	\$125.00
29. Scrap tire storage, annual	\$125.00
30. Spray painting/dipping	\$129.00
31. State licensed facilities	
(child care facility) annual	\$132.00
(residential care facility, small assisted living facility and adult day care facility), annual	\$132.00
32. Temporary membrane structures and tents	\$75.00
33. Tire-rebuilding plant	\$125.00
34. Torch and open flames	\$114.00
35. Trench burning (per day)	\$320.00
36. Waste handling, annual	\$135.00
37. Welding/cutting/hotworks	\$80.00"

28. Section 105, "Permits and Fees," of Chapter 1, "Administration," of the 2006 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 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 before the violation is determined to be eliminated

NUMBER OF REINSPECTIONS	FEE
1 <sup>ST</sup>	\$00
2 <sup>ND</sup>	\$80
3 <sup>RD</sup> AND EACH SUBSEQUENT	\$105

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

1. A Group R, Division 3 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.”

29. Subsection 106.3, “Concealed Work,” of Section 106, “Inspections,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

**“106.3 Concealed work.** Whenever any installation subject to inspection prior to use is covered or concealed without having first been inspected, the fire code official shall have the authority to require that such work be exposed for inspection. Neither the fire code official nor the jurisdiction are liable for expense entailed in the removal or replacement of any material required to allow inspection.”

30. Section 108, “Board of Appeals,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

## **“SECTION 108 BOARD OF APPEALS**

~~[108.1 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.]~~

**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.

~~[108.3 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.]~~

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

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

7. Two persons having a record of active participation in community affairs.

**108.5 Ex-officio members.** In addition to the nine board members enumerated in Section 108.4, the building official and fire marshal shall serve as ex-officio members of the board without voting privileges.

**108.6 Appointment and terms.** The city manager shall nominate and the city council shall appoint the nine board members enumerated in Section 108.4 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.

**108.7 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.

**108.8 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.

**108.9 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.

**108.10 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.”

31. Paragraph 109.2.1, “Service,” of Subsection 109.2, “Notice of Violation,” of Section 109, “Violations,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

**“109.2.1 Service.** A notice of violation issued pursuant to this code shall be served upon the owner, operator, occupant, or other person responsible for the condition or violation, either by verbal notification, 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, occupant or both. Orders or notices shall set forth a time limit for compliance dependent upon the hazard and danger created by the violation. Orders or notices which are given verbally shall be confirmed by service in writing as herein provided.”

32. Subsection 109.3, “Violation Penalties,” of Section 109, “Violations,” of Chapter 1, “Administration,” of the 2006 International Fire Code is amended to read as follows:

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

**109.3.1 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.

**109.3.2 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.

**109.3.3 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."

33. Subsection 110.2, "Evacuation," of Section 110, "Unsafe Buildings," of Chapter 1, "Administration," of the 2006 International Fire Code is amended to read as follows:

**"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, [or] premises or vehicle and shall not enter or re-enter until authorized to do so by the fire code official or the fire department official in charge of the incident.

**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, which has or is a fire hazard."

34. Subsection 110.4, "Abatement," of Section 110, "Unsafe Buildings," of Chapter 1, "Administration," of the 2006 International Fire Code is amended to read as follows:

**"110.4 Abatement.** The owner, 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*."

35. Subsection 111.4, "Failure to Comply," of Section 111, "Stop Work Order," of Chapter 1, "Administration," of the 2006 International Fire Code is amended to read as follows:

**"111.4 Failure to comply.** Any person who shall knowingly 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]~~.”

36. Chapter 1, “Administration,” of the 2006 International Fire Code is amended by adding a new Section 112, “Certificate of Occupancy,” to read as follows:

## **“SECTION 112 CERTIFICATE OF OCCUPANCY**

**112.1 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 therefor 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.

**112.2 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.

**112.3 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.

**112.4 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*.

37. Chapter 1, “Administration,” of the 2006 International Fire Code is amended by adding a new Section 113, “Fire-Safety Registration of Commercial Buildings,” to read as follows:

**“SECTION 113  
FIRE-SAFETY REGISTRATION OF COMMERCIAL BUILDINGS**

**113.1 Certificate of registration.** A person commits an offense if he knowingly owns, operates or controls a commercial building in the city without a valid certificate of registration issued under this section.

**113.2 Display of certificate.** A registrant shall present upon request a certificate of registration for examination by the fire chief.

**113.3 Application for registration.** To obtain a certificate of registration, a person shall submit an application to the fire chief on a form provided for that purpose. The applicant shall be the person who will own, control or operate the commercial building. 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 commercial building's owner.
3. The name, address and main telephone number, if any, of the commercial building.
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 size of the commercial building, including the number of stories and the area in square feet of each floor.
6. The type of occupancy or occupancies conducted in the commercial building.
7. A description of any hazardous operations being conducted in the commercial building.
8. A description of fire protection features and any unique aspects of the commercial building.
9. Such additional information as the fire chief deems necessary to the administration and enforcement of this section.

**113.4 Name, address and telephone number of owner.** A certificate of registration shall contain the name, street address and telephone number of the structure's owner.

**113.5 Expiration and renewal of registration.** A certificate of registration expires January 1 of each year and may be renewed by making application in accordance with Section 113.3. A registrant shall apply for renewal at least 30 days before the expiration of the registration.

**113.6 Nontransferability.** A certificate of registration is not transferable without written permission from the fire chief.

**113.7 Registrant's records.** Each registrant shall maintain business records at a single location for the commercial building. A registrant shall make those records available for inspection by the fire chief at reasonable times upon request.

**113.8 Notification of change of information.** A registrant shall notify the fire chief within 10 days of any material change in the information contained in the application for registration of a commercial building.

**113.9 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.”

38. Section 202, “General Definitions,” of Chapter 2, “Definitions,” of the 2006 International Fire Code is amended by adding or amending the following definitions in alphabetical order:

**“AERIAL SHELL.** See Section 3302.1.

**AIRCRAFT MOTOR FUEL-DISPENSING FACILITY.** See Section 2202.1.

**BINARY EXPLOSIVE.** See Section 3302.1.

**BREAK (Aerial Shell).** See Section 3302.1.

**CERTIFICATE OF REGISTRATION.** A written authority issued under Section 113 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.

**COVERED MALL BUILDINGS.** See Section 402.1.

**DESIGNATED LANDING AREA.** See Section 3302.1.

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

**FIRE DEPARTMENT INLET CONNECTION.** See Section 902.1.

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

**FIRE-RETARDANT WOOD SHAKES AND SHINGLES.** See Section 302.1.

**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.

**FIXED GROUND PIECE.** See Section 3302.1.

**GROUND PIECE.** See Section 3302.1.

**HIGH EXPLOSIVE.** See Section 3302.1.

**HIGH-RISE BUILDING.** A building having floors used for human occupancy located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.

~~**HOT WORK PROGRAM.** See Section 2602.1.~~

**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.

**LOW EXPLOSIVE.** See Section 3302.1.

**OCCUPANCY CLASSIFICATION.** For the purposes of this code, certain occupancies are defined as follows:

[B] **Assembly Group A.** Assembly Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering together of persons for purposes such as civic, social or religious functions; recreation, food or drink consumption; or awaiting transportation.

**Exceptions:**

1. A building used for assembly purposes with an occupant load of less than 50 persons shall be classified as a Group B occupancy.

2. A room or space used for assembly purposes with an occupant load of less than 50 persons and accessory to another occupancy shall be classified as a Group B occupancy or classified as part of that occupancy.

3. A room or space used for assembly purposes that is less than 750 square feet (70 m<sup>2</sup>) in area and is accessory to another occupancy shall be classified as a Group B occupancy or classified as part of that occupancy.

Assembly occupancies shall include the following:

**A-1** Assembly uses, usually with fixed seating, intended for the production and viewing of performing arts or motion pictures including but not limited to:

- Motion picture theaters
- Symphony and concert halls
- Television and radio studios admitting an audience
- Theaters

**A-2** Assembly uses intended for food and/or drink consumption including, but not limited to:

- Banquet halls
- Night clubs
- Restaurants
- Taverns and bars

**A-3** Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A, including, but not limited to:

- Amusement arcades
- Art galleries
- Bowling alleys
- Community halls
- Courtrooms
- Dance halls (not including food or drink consumption)
- Exhibition halls
- Funeral parlors
- Gymnasiums (without spectator seating)
- Indoor swimming pools (without spectator seating)
- Indoor tennis courts (without spectator seating)
- Lecture halls
- Libraries
- Museums
- Places of religious worship
- Pool and billiard parlors

Waiting areas in transportation terminals

**A-4** Assembly uses intended for viewing of indoor sporting events and activities with spectator seating including, but not limited to:

- Arenas
- Skating rinks
- Swimming pools
- Tennis courts

**A-5** Assembly uses intended for participation in or viewing outdoor activities including, but not limited to:

- Amusement park structures
- Bleachers
- Grandstands
- Stadiums

**[B] Business Group B.** Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

- Airport traffic control towers
- Animal hospitals, kennels and pounds
- Banks
- Barber and beauty shops
- Car wash
- Civic administration
- Clinic-outpatient
- Dry cleaning and laundries; pick-up and delivery stations and self-service
- Educational occupancies for students above the 12th grade
- Electronic data processing
- Fire stations
- Laboratories; testing and research
- Motor vehicle showrooms
- Police stations with detention facilities for five or less
- Post offices
- Print shops
- Professional services (architects, attorneys, dentists, physicians, engineers, etc.)
- Radio and television stations
- Telephone exchanges
- Training and skill development not within a school or academic program

**[B] Educational Group E.** Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at

anyone time for educational purposes through the 12th grade. Religious educational rooms and religious auditoriums, which are accessory to places of religious worship in accordance with Section 508.3.1 of the *International Building Code* and have occupant loads of less than 100, shall be classified as Group A-3 occupancies.

**Day care.** The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2 1/2 years of age shall be classified as an E occupancy.

**[B] Factory Industrial Group F.** Factory Industrial Group F occupancy includes, among others, the use of a building or structure, or a portion thereof, for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair or processing operations that are not classified as a Group H high-hazard or Group S storage occupancy.

**Factory Industrial F-1 Moderate-hazard Occupancy.** Factory Industrial uses which are not classified as Factory Industrial Group F-2 shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

- Aircraft
- Appliances
- Athletic equipment
- Automobiles and other motor vehicles
- Bakeries
- Beverages; over 12 percent in alcohol content
- Bicycles
- Boats
- Brooms or brushes
- Business machines
- Cameras and photo equipment
- Canvas and similar fabric
- Carpet and rugs (includes cleaning)
- Disinfectants
- Dry cleaning and dyeing
- Electric generation plants
- Electronics
- Engines (including rebuilding)
- Food processing
- Furniture
- Hemp products
- Jute products
- Laundries
- Leather products
- Machinery

Metals  
Millwork (sash and doors)  
Motion picture and television filming (without spectators)  
Musical instruments  
Optical goods  
Paper mills or products  
Photographic film  
Plastic products  
Printing or publishing  
Recreational vehicles  
Refuse incineration  
Shoes  
Soaps and detergents  
Textiles  
Tobacco  
Trailers  
Upholstering  
Wood; distillation  
Woodworking (cabinet)

**[B] Factory Industrial F -2 Low-hazard Occupancy.** Factory industrial uses involving the fabrication or manufacturing of noncombustible materials which, during finishing, packaging or processing do not involve a significant fire hazard, shall be classified as Group F-2 occupancies and shall include, but not be limited to, the following:

Beverages; up to and including 12 percent alcohol content  
Brick and masonry  
Ceramic products  
Foundries  
Glass products  
Gypsum  
Ice  
Metal products (fabrication and assembly)

**High-hazard Group H.** High-hazard Group H occupancy includes, among others, the use of a building or structure, or a portion thereof, that involves the manufacturing, processing, generation or storage of materials that constitute a physical or health hazard in quantities in excess of quantities allowed in control areas constructed and located as required in Section 2703.8.3. Hazardous uses are classified in Groups H-1, H-2, H-3, H-4 and H-5 and shall be in accordance with this code and the requirements of Section 415 of the *International Building Code* .

**Exceptions:** The following shall not be classified in Group H, but shall be classified in the occupancy that they most nearly resemble:

1. Buildings and structures that contain not more than the maximum allowable quantities per control area of hazardous materials as shown in Tables 2703.1.1(1) and 2703.1.1(2), provided that such buildings are maintained in accordance with this code.

2. Buildings utilizing control areas in accordance with Section 2703.8.3 that contain not more than the maximum allowable quantities per control area of hazardous materials as shown in Tables 2703.1.1(1) and 2703.1.1(2).

3. Buildings and structures occupied for the application of flammable finishes, provided that such buildings or areas conform to the requirements of Section 416 of the *International Building Code* and Chapter 15 of this code.

4. Wholesale and retail sales and storage of flammable and combustible liquids in mercantile occupancies conforming to Chapter 34.

5. Closed piping systems containing flammable or combustible liquids or gases utilized for the operation of machinery or equipment.

6. Cleaning establishments that utilize combustible liquid solvents having a flash point of 140°F (60°C) or higher in closed systems employing equipment listed by an approved testing agency, provided that this occupancy is separated from all other areas of the building by 1-hour fire barriers constructed in accordance with Section 706 of the *International Building Code* or 1-hour horizontal assemblies constructed in accordance with Section 711 of the *International Building Code*, or both.

7. Cleaning establishments that utilize a liquid solvent having a flash point at or above 200°F (93°C).

8. Liquor stores and distributors without bulk storage.

9. Refrigeration systems.

10. The storage or utilization of materials for agricultural purposes on the premises.

11. Stationary batteries utilized for facility emergency power, uninterrupted power supply or telecommunication facilities, provided that the batteries are provided with safety venting caps and ventilation is provided in accordance with the *International Mechanical Code*.

12. Corrosives shall not include personal or household products in their original packaging used in retail display or commonly used building materials.

13. Buildings and structures occupied for aerosol storage shall be classified as Group S-1, provided that such buildings conform to the requirements of Chapter 28.

14. Display and storage of nonflammable solid and nonflammable or noncombustible liquid hazardous materials in quantities not exceeding the maximum allowable quantity per control area in Group M or S occupancies complying with Section 2703.8.3.5.

15. The storage of black powder, smokeless propellant and small arms primers in Groups M and R-3 and special industrial explosive devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements of this code.

**High-hazard Group H-1.** Buildings and structures containing materials that pose a detonation hazard, shall be classified as Group H-1. Such materials shall include, but not be limited to, the following:

**Explosives:**

Division 1.1

Division 1.2

Division 1.3

**Exception:** Materials that are used and maintained in a form where either confinement or configuration will not elevate the hazard from a mass fire to mass explosion hazard shall be allowed in Group H-2 occupancies.

Division 1.4

**Exception:** Articles, including articles packaged for shipment, that are not regulated as an explosive under Bureau of Alcohol, Tobacco and Firearms regulations, or unpackaged articles used in process operations that do not propagate a detonation or deflagration between articles shall be allowed in Group H-3 occupancies.

Division 1.5

Division 1.6

Organic peroxides, unclassified detonable

Oxidizers, Class 4

Unstable (reactive) materials, Class 3 detonable, and

Class 4

Detonable pyrophoric materials

**High-hazard Group H-2.** Buildings and structures containing materials that pose a deflagration hazard or a hazard from accelerated burning, shall be classified as Group H-2. Such materials shall include, but not be limited to, the following:

Class I, or II or IIIA flammable or combustible liquids which are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 pounds per square inch (103.4 kPa) gauge

- Combustible dusts
- Cryogenic fluids, flammable
- Flammable gases
- Organic peroxides, Class I
- Oxidizers, Class 3, that are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 pounds per square inch (103.4 kPa) gauge
- Pyrophoric liquids, solids and gases, nondetonable
- Unstable (reactive) materials, Class 3, nondetonable
- Water-reactive materials, Class 3

**High-hazard Group H-3.** Buildings and structures containing materials that readily support combustion or that pose a physical hazard shall be classified as Group H-3. Such materials shall include, but not be limited to, the following:

Class I, II or IIIA flammable or combustible liquids that are used or stored in normally closed containers or systems pressurized at 15 pounds per square inch gauge (103.4 kPa) or less

- Combustible fibers, other than densely packed baled cotton
- Consumer fireworks, 1.4G (Class C, Common)
- Cryogenic fluids, oxidizing
- Flammable solids
- Organic peroxides, Class II and III
- Oxidizers, Class 2
- Oxidizers, Class 3, that are used or stored in normally closed containers or systems pressurized at 15 pounds per square inch gauge (103 kPa) or less.
- Oxidizing gases
- Unstable (reactive) materials, Class 2
- Water-reactive materials, Class 2

**High-hazard Group H-4.** Buildings and structures which contain materials that are health hazards shall be classified as Group H-4. Such materials shall include, but not be limited to, the following:

- Corrosives
- Highly toxic materials
- Toxic materials

**High-hazard Group H-5.** Semiconductor fabrication facilities and comparable research and development areas in which hazardous production materials (HPM) are used and the aggregate quantity of materials is in excess of those listed in Tables 2703.1.1(1)

and 2703.1.1(2) shall be classified as Group H-5. Such facilities and areas shall be designed and constructed in accordance with Section 415.8 of the *International Building Code*.

**[B] Institutional Group I.** Institutional Group 1 occupancy includes, among others, the use of a building or structure, or a portion thereof, in which people, cared for or living in a supervised environment and having physical limitations because of health or age, are harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 or I-4.

**Group I-1.** This occupancy shall include buildings, structures or parts thereof housing more than 16 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- Convalescent facilities
- Group homes
- Half-way houses
- Residential board and care facilities
- Social rehabilitation facilities

A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2 of the *International Building Code*. A facility such as above, housing at least six and not more than 16 persons, shall be classified as Group R-4.

**[B] Group I-2.** This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing or custodial care on a 24-hour basis of more than five persons who are not capable of self-preservation. This group shall include, but not be limited to, the following:

- Hospitals
- Nursing homes (both intermediate care facilities and skilled nursing facilities)
- Mental hospitals
- Detoxification facilities

A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2 of the *International Building Code*.

**Group I-3.** This occupancy shall include buildings and structures which are inhabited by more than five persons who are under restraint or security. An I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control. This group shall include, but not be limited to, the following:

- Correctional centers
- Detention centers
- Jails
- Prerelease centers
- Prisons
- Reformatories

Buildings of Group I-3 shall be classified as one of the occupancy conditions indicated below:

**Condition 1.** This occupancy condition shall include buildings in which free movement is allowed from sleeping areas and other spaces where access or occupancy is permitted, to the exterior via means of egress without restraint. A Condition 1 facility is permitted to be constructed as Group R.

**Condition 2.** This occupancy condition shall include buildings in which free movement is allowed from sleeping areas and any other occupied smoke compartment to one or more other smoke compartments. Egress to the exterior is impeded by locked exits.

**Condition 3.** This occupancy condition shall include buildings in which free movement is allowed within individual smoke compartments, such as within a residential unit comprised of individual sleeping units and group activity spaces, where egress is impeded by remote-controlled release of means of egress from such smoke compartment to another smoke compartment.

**Condition 4.** This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Remote-controlled release is provided to permit movement from sleeping units, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

**Condition 5.** This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Staff-controlled manual release is provided to permit movement from sleeping units, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

**Group 1-4, day care facilities.** This group shall include buildings and structures occupied by persons of any age who receive custodial care for less than 24 hours by individuals other than parents or guardians, relatives by blood marriage, or adoption, and in a place other than the home of the person cared for. A facility such as the above with five or fewer persons shall be classified as Group R- 3 or shall comply with the

*International Residential Code* in accordance with Section 101.2 of the *International Building Code*. Places of worship during religious functions are not included.

**Adult care facility.** A facility that provides accommodations for less than 24 hours for more than five unrelated adults and provides supervision and personal care services shall be classified as Group I-4.

**Exception:** Where the occupants are capable of responding to an emergency situation without physical assistance from the staff the facility shall be classified as Group A-3.

**Child care facility.** A facility that provides supervision and personal care on less than a 24-hour basis for more than five children 2 1/2 years of age or less shall be classified as Group I-4.

**Exception:** A child day care facility which provides care for more than five but no more than 100 children 2 1/2 years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

**[B] Mercantile Group M.** Mercantile Group M occupancy includes, among others, buildings and structures or a portion thereof, for the display and sale of merchandise, and involves stocks of goods, wares or merchandise incidental to such purposes and accessible to the public. Mercantile occupancies shall include, but not be limited to, the following;

- Department stores
- Drug stores
- Markets
- Motor fuel-dispensing facilities
- Retail or wholesale stores
- Sales rooms

**[B] Residential Group R.** Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the *International Residential Code* in accordance with Section 101.2 of the *International Building Code*. Residential occupancies shall include the following:

**R-1** Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

- Boarding houses (transient)
- Hotels (transient)
- Motels (transient)

**R-2** Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature, including:

- Apartment houses
- Boarding houses (not transient)
- Convents
- Dormitories
- Fraternities and sororities
- Hotels (nontransient)
- Monasteries
- Motels (nontransient)
- Vacation timeshare properties

Congregate living facilities with 16 or fewer occupants are permitted to comply with the construction requirements for Group R-3.

**R-3** Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4 or I, including:

- Buildings that do not contain more than two dwelling units

- Adult care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours

- Child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours

- Congregate living facilities with 16 or fewer persons.

Adult and child care facilities that are within a single-family home are permitted to comply with the *International Residential Code*.

**R-4** Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than five but not more than 16 occupants, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined in the *International Building Code* for Group R-3, except as otherwise provided for in that code, or shall comply with the *International Residential Code*.

**[B] Storage Group S.** Storage Group S occupancy includes, among others, the use of a building or structure, or a portion thereof, for storage that is not classified as a hazardous occupancy.

**Moderate-hazard storage, Group S-1.** Buildings occupied for storage uses that are not classified as Group S-2, including, but not limited to, storage of the following:

Aerosols, Levels 2 and 3  
Aircraft repair hangar  
Bags; cloth, burlap and paper  
Bamboos and rattan  
Baskets  
Belting; canvas and leather  
Books and paper in rolls or packs  
Boots and shoes  
Buttons, including cloth covered, pearl or bone  
Cardboard and cardboard boxes  
Clothing, woolen wearing apparel  
Cordage  
Dry boat storage (indoor)  
Furniture  
Furs  
Glues, mucilage, pastes and size  
Grains  
Horns and combs, other than celluloid  
Leather  
Linoleum  
Lumber  
Motor vehicle repair garages (complying with the *International Building Code*  
and containing less than the maximum allowable quantities of hazardous  
materials)  
Photo engravings  
Resilient flooring  
Silks  
Soaps  
Sugar  
Tires, bulk storage of  
Tobacco, cigars, cigarettes and snuff  
Upholstery and mattresses  
Wax candles

**Low-hazard storage, Group S-2.** Includes, among others, buildings used for the storage of noncombustible materials such as products on wood pallets or in paper cartons with or without single thickness divisions; or in paper wrappings. Such products may have a negligible amount of plastic trim such as knobs, handles, or film wrapping. Storage uses shall include, but not be limited to, storage of the following:

Aircraft hangar  
Asbestos  
Beverages up to and including 12-percent alcohol in metal, glass or ceramic  
containers  
Cement in bags  
Chalk and crayons

Dairy products in nonwaxed coated paper containers  
Dry cell batteries .  
Electrical coils  
Electrical motors  
Empty cans  
Food products  
Foods in noncombustible containers  
Fresh fruits and vegetables in nonplastic trays or containers  
Frozen foods  
Glass  
Glass bottles, empty or filled with noncombustible liquids  
Gypsum board  
Inert pigments  
Ivory  
Metal desks with plastic tops and trim  
Metal parts  
Metals  
Mirrors  
Oil-filled and other types of distribution transformers  
Parking garages (open or enclosed)  
Porcelain and pottery  
Stoves  
Talc and soapstones  
Washers and dryers

**[B] Miscellaneous Group U.** Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirements of this code commensurate with the fire and life hazard incidental to their occupancy. Group U shall include, but not be limited to, the following:

Agricultural buildings  
Aircraft hangar, accessory to a one- or two-family residence (see Section 412.3 of the *International Building Code*)  
Barns  
Carports  
Fences more than 6 feet (1829 mm) high  
Grain silos, accessory to a residential occupancy  
Greenhouses  
Livestock shelters  
Private garages  
Retaining walls  
Sheds  
Stables  
Tanks  
Towers

**PATH OF EGRESS.** See Section 902.1.

**PYROTECHNIC OPERATOR.** See Section 3302.1.

**REGISTRANT.** An individual who has been issued a certificate of registration for a commercial building under Section 113 of this code.

~~**[RESPONSIBLE PERSON.**~~ See Section 2602.1.]

**SAFETY CAP.** See Section 3302.1.

**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.** See Section 902.1 ~~[A building that is temporary, permanent or mobile that contains a device or system that conveys passengers or provides a walkway along, around or over a course in any direction as a form of amusement arranged so that the egress path is not readily apparent due to visual or audio distractions or an intentionally confounded egress path, or is not readily available because of the mode of conveyance through the building or structure].~~

**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.** See Section 3302.1.

**UNTREATED WOOD SHAKES OR WOOD SHINGLES.** See Section 302.1.

**WOOD SHAKES.** See Section 302.1.

**WOOD SHINGLES.** See Section 302.1.

39. Subsection 301.2, “Permits,” of Section 301, “General,” of Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended to read as follows:

**“301.2 Permits.** Permits shall be ~~[required as set forth]~~ in accordance with Section 105.6 ~~[for the activities or uses regulated by Sections 306, 307, 308.3, 308.4, 308.5 and 315].”~~

40. Subsection 302.1, “Definitions,” of Section 302, “Definitions,” of Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended by adding the following definitions in alphabetical order:

**“FIRE-RETARDANT WOOD SHAKES AND SHINGLES.** Shakes and shingles that have the meaning given that term in Chapter 15 of the *Dallas Building Code*, as amended.

**UNTREATED WOOD SHAKES OR WOOD SHINGLES.** Wood shakes or wood shingles that are not fire-retardant shakes and shingles.

**WOOD SHAKES.** Tapered or nontapered pieces of durable wood of random widths ranging from 4 inches (102 mm) to 14 inches (356 mm) and of the following four types:

1. **Hand split and resawn:** Tapered with one sawed and one split face; semi-split; tapered with partially sawn and split faces both sides, 15 inches (351 mm), 28 inches (711 mm) or 24 inches (610 mm) in length.
2. **Taper split:** Tapered with both split faces, 24 inches (610 mm) in length.
3. **Straight split:** Nontapered with both split faces, either 28 inches (711 mm) or 24 inches (610 mm) in length.
4. **Tapersawn:** Sawn both sides, edges sawn or split, in lengths 24 inches (610 mm) and longer.

**WOOD SHINGLES.** Tapered pieces of durable wood, sawn both sides, of random widths ranging from 3 inches (76 mm) to 14 inches (356 mm) and in lengths of 16 inches (406 mm), 18 inches (457 mm) or 24 inches (610 mm).”

41. Paragraph 304.3.1, “Spontaneous Ignition,” of Subsection 304.3, “Containers,” of Section 304, “Combustible Waste Material,” of Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended to read as follows:

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

42. Section 304, “Combustible Waste Material,” of Chapter 3, “General Precautions Against Fire,” of the 2006 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.”

43. Subsection 306.1, “Motion Picture Projection Rooms,” of Section 306, “Motion Picture Projection Rooms and Film,” of Chapter 3, “General Precautions Against Fire,” of the 2006 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.”

44. Subsection 306.1, “Motion Picture Projection Rooms,” of Section 306, “Motion Picture Projection Rooms and Film,” of Chapter 3, “General Precautions Against Fire,” of the 2006 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.”

45. Subsection 307.2, “Permit Required,” of Section 307, “Open Burning and Recreational Fires,” of Chapter 3, “General Precautions Against Fire,” of the 2006 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, open burning, air curtain incinerator operations, pit burning or trench burning [~~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 Texas Commission on Environmental Quality [~~state or local air and water quality management authority~~], provided that all conditions specified in the authorization are followed.

**307.2.2 Time and atmospheric restrictions.** 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.”

46. Subsection 307.4, “Location,” of Section 307, “Open Burning and Recreational Fires,” of Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended to read as follows:

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

**Exceptions:**

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

47. Subsection 307.4, “Location,” of Section 307, “Open Burning and Recreational Fires,” of Chapter 3, “General Precautions Against Fire,” of the 2006

International Fire Code is amended by adding a new Subsection 307.4.3, “Trench Burns and Other Air Current Burns,” to read as follows:

**“307.4.3 Trench burns and other air current burns.** Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2. Operation of air curtain incinerators and pit burners shall be in accordance with Section 307.2 and Section 603.”

48. Subsection 307.5, “Attendance,” of Section 307, “Open Burning and Recreational Fires,” of Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended to read as follows:

**“307.5 Attendance.** Open burning, air curtain incinerators, pit burns, trench burns, bonfires or recreational fires shall be constantly attended, and an attendant shall remain on site a minimum of 30 minutes after ~~until~~ the fire is extinguished. A minimum of one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate utilization.”

49. Subsection 308.1, “General,” of Section 308, “Open Flames,” of Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended to read as follows:

**“308.1 General.** This section shall control open flames, fire and burning on all premises. Flame effects before an audience shall comply with NFPA 160 and this code.”

50. Paragraph 308.3.1, “Open-Flame Cooking Devices,” of Subsection 308.3, “Open Flame,” of Section 308, “Open Flames,” of Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is retitled as Paragraph 308.3.1, “Open-Flame Cooking and Heating Devices,” and amended to read as follows:

**“308.3.1 Open-flame cooking and heating devices.** Charcoal burners and other open-flame cooking devices and heating devices including outdoor fireplaces shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.

**Exceptions:**

1. One-and two-family dwellings.
2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system.

**308.3.1.1 Liquefied-petroleum-gas-fueled cooking devices.** When permitted as listed in the exceptions of Section 308.3.1, LP-gas burners having an LP-gas container with a water capacity greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity] shall not be operated [located] on combustible balconies or within 10 feet (3048 mm) of combustible construction.

**Exception:** One- and two-family dwellings. Other residential occupancies may have containers with a water capacity not greater than 47.6 pounds (22 kg) [nominal 1 pound (0.454 kg) LP-gas capacity] when those residential occupancies are in compliance with Section 308.3.1, Exception 2."

51. Paragraph 308.3.2, "Open-Flame Decorative Devices," of Subsection 308.3, "Open Flame," of Section 308, "Open Flames," of Chapter 3, "General Precautions Against Fire," of the 2006 International Fire Code is retitled as Paragraph 308.3.2, "Candles and Other Open-Flame Decorative Devices."

52. Paragraph 308.3.6, "Theatrical Performances," of Subsection 308.3, "Open Flame," of Section 308, "Open Flames," of Chapter 3, "General Precautions Against Fire," of the 2006 International Fire Code is amended to read as follows:

**"308.3.6 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. Open-flame devices shall be approved by the fire chief. The fire chief may require standby personnel."

53. Section 311, "Vacant Premises," of Chapter 3, "General Precautions Against Fire," of the 2006 International Fire Code is retitled as Section 311, "Vacant and Partially Burned Premises."

54. Subsection 311.1, “General,” of Section 311, “Vacant and Partially Burned Premises,” of Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended to read as follows:

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

55. Paragraph 311.2.1, “Security,” of Subsection 311.2, “Safeguarding Vacant Premises,” of Section 311, “Vacant and Partially Burned Premises,” of Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended to read as follows:

**“311.2.1 Security.** Exterior openings and interior openings accessible to other tenants or unauthorized persons shall be maintained securely [boarded,] locked or barricaded to prevent unauthorized entry in accordance with Section I102, ‘Specifications for Securing Unsecured Vacant Structures,’ of Appendix I ~~[, blocked or otherwise protected to prevent entry by unauthorized individuals].~~”

56. Subsection 311.2, “Safeguarding Vacant Premises,” of Section 311, “Vacant and Partially Burned Premises,” of Chapter 3, “General Precautions Against Fire,” of the 2006 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.”

57. Subsection 311.2, “Safeguarding Vacant Premises,” of Section 311, “Vacant and Partially Burned Premises,” of Chapter 3, “General Precautions Against Fire,” of the 2006 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.

58. Subsection 311.3, “Removal of Combustibles,” of Section 311, “Vacant and Partially Burned Premises,” of Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended to read as follows:

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

**Exception[s]:**

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

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

59. Subsection 311.5, “Placards,” of Section 311, “Vacant and Partially Burned Premises,” of Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended to read as follows:

**“311.5 Placards.** Any building or structure determined to be unsafe pursuant to Section 110 of this code shall be marked as required by Sections 311.5.1 through 311.5.5. 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.”

60. Subsection 314.2, “Fixtures and Displays,” of Section 314, “Indoor Displays,” of Chapter 3, “General Precautions Against Fire,” of the 2006 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.”

61. Subsection 314.4, “Vehicles,” of Section 314, “Indoor Displays,” of Chapter 3, “General Precautions Against Fire,” of the 2006 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 the lesser of 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.”

62. Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended by adding a new Section 316, “Parade Floats,” to read as follows:

**“SECTION 316  
PARADE FLOATS**

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

**316.2 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.”

63. Chapter 3, “General Precautions Against Fire,” of the 2006 International Fire Code is amended by adding a new Section 317, “Untreated Wood Shakes and Wood Shingles,” to read as follows:

**“SECTION 317  
UNTREATED WOOD SHAKES AND WOOD SHINGLES**

**317.1 Signs.** A person commits an offense if he knowingly sells or offers for sale untreated wood shakes or wood shingles from any premises in the city without having signs conspicuously posted on the premises in accordance with the following requirements:

1. Each sign shall be posted in the form, number, manner and location approved by the fire code official such that at least one sign is conspicuous to every person buying or attempting to buy untreated wood shakes or wood shingles. At least one sign shall be posted near each entrance on the premises, and at least one sign shall be posted at each separate display of untreated wood shakes or wood shingles.
2. Each sign shall be constructed of a durable material with an area of not less than 200 square inches (13 m<sup>2</sup>) and contain clearly legible red letters, at least <sup>3</sup>/<sub>4</sub> inch (19 mm) in height with at least <sup>1</sup>/<sub>8</sub>-inch (3.2 mm) stroke, on a white background.
3. Each sign shall contain the following or similar language approved by the fire code official:

## NOTICE

Use of untreated wood shakes or shingles as roof covering materials in the City of Dallas is a criminal offense punishable by fines up to \$2,000 under Chapter 15 of the Dallas Building Code. Records of all purchases of untreated wood shakes and shingles are required by Section 317 of the Dallas Fire Code.

**317.2 Labels.** A person commits an offense if he knowingly sells or offers for sale untreated wood shakes or wood shingles in the city without having each bundle of shakes or shingles conspicuously labeled in accordance with the following requirements:

1. The form, manner and location of each label shall be approved by the fire code official.
2. Each label shall have an area of not less than 20 square inches (.013 m<sup>2</sup>) and contain clearly legible black letters on a red background.
3. Each label shall contain the following statement or similar language approved by the fire code official:

### UNTREATED WOOD SHAKES OR SHINGLES

Use as roof covering material in the City of Dallas is a criminal offense punishable by fines up to \$2,000 under Chapter 15 of the Dallas Building Code.

**317.3 Purchase record required.** A person commits an offense if he knowingly sells untreated wood shakes or wood shingles in the city to any person who does not complete a record of purchase, on a form approved by the fire code official, which includes the following information:

1. The name, address and telephone number of the purchaser.
2. The distinctive number from the purchaser's driver license, military identification card, passport or personal identification certificate.
3. The date of purchase of the wood shakes or wood shingles.
4. The quantity of wood shakes or wood shingles purchased.
5. The intended use of the wood shakes or wood shingles and each location where the wood shakes or wood shingles will be used.
6. A statement that the purchaser has been informed that the use of untreated wood shakes and wood shingles as roof covering material in the City of Dallas is a criminal offense under Chapter 15 of the *Dallas Building Code*, and any violator, upon conviction, may be punished by a fine of up to \$2,000.

7. The signature of the purchaser.
8. The name of the individual obtaining the record of the purchase transaction.

**317.4 Maintenance and inspection records.** A person who sells or offers for sale untreated wood shakes or wood shingles shall maintain on file the purchase records required under Section 317 for not less than one year after the date of each purchase of untreated wood shakes or wood shingles. The purchase records shall be made available for inspection by the fire code official, the building official or any peace officer, upon request, at the seller's place of business during the seller's usual and customary business hours."

64. Subsection 401.1, "Scope," of Section 401, "General," of Chapter 4, "Emergency Planning and Preparedness," of the 2006 International Fire Code is amended to read as follows:

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

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

65. Paragraph 401.3.1, "Making False Report," of Subsection 401.3, "Emergency Forces Notification," of Section 401, "General," of Chapter 4, "Emergency Planning and Preparedness," of the 2006 International Fire Code is retitled as Paragraph 401.3.1, "False Alarms," and amended to read as follows:

**"401.3.1 [Making] F[f]alse alarms [report].** False alarms [It] shall not be [unlawful for a person to] given, signaled, or transmitted or caused or permitted to be given, signaled or transmitted in any manner [a false alarm]."

66. Section 402, "Definitions," of Chapter 4, "Emergency Planning and Preparedness," of the 2006 International Fire Code is amended to read as follows:

## **“SECTION 402 DEFINITIONS**

**402.1 Definitions.** The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

**COVERED MALL BUILDINGS.** A single building enclosing a number of tenants and occupants such as retail stores, drinking and dining establishments, entertainment and amusement facilities, passenger transportation terminals, offices and other similar uses wherein two or more tenants have a main entrance into one or more malls. For the purpose of this chapter, anchor buildings shall not be considered as a part of the covered mall building.

**EMERGENCY EVACUATION DRILL.** An exercise performed to train staff and occupants and to evaluate their efficiency and effectiveness in carrying out emergency evacuation procedures.”

67. Section 403, “Public Assemblages and Events,” of Chapter 4, “Emergency Planning and Preparedness,” of the 2006 International Fire Code is retitled as Section 403, “Public assemblages and Other Occupied Buildings.”

68. Subsection 403.1, “Fire Watch Personnel,” of Section 403, “Public Assemblages and Other Occupied Buildings,” of Chapter 4, “Emergency Planning and Preparedness,” of the 2006 International Fire Code is retitled as Subsection 403.1, “Standby Personnel,” and amended to read as follows:

**“403.1 Standby [~~Fire watch~~] personnel.** When, in the opinion of the fire chief [~~code official~~], it is essential for public safety in a place of assembly or any other occupied building [~~place where people congregate~~], because of the number of persons, failure of life safety systems or the nature of the performance, exhibition, display, contest or activity, the owner, agent or lessee shall employ standby [~~provide one or more fire watch~~] personnel[;] as defined in Section 202 [~~required and approved,~~] to remain on duty during the times such places are occupied [~~open to the public, or when such activity is being conducted~~].

**403.1.1 Duties.** Standby [~~Fire watch~~] personnel shall keep diligent watch for fires[; ~~obstructions to means of egress and other hazards~~] during the time such place is occupied [~~open to the public or such activity is being conducted~~] and take prompt measures as directed by the fire chief. Such duties shall include, but not be limited to, [~~for~~] remediation of hazards, extinguishment of fires that occur and assistance in the evacuation of the public from the structures.”

69. Subsection 404.2, “Where Required,” of Section 404, “Fire Safety and Evacuation Plans,” of Chapter 4, “Emergency Planning and Preparedness,” of the 2006 International Fire Code is amended to read as follows:

**“404.2 Where required.** An approved fire safety and evacuation plan shall be prepared and maintained for the following occupancies and buildings.

1. Group A, other than Group A occupancies used exclusively for purposes of religious worship that have an occupant load less than 2,000.
2. 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.
3. Group E. The operator of a premises housing an educational institution shall prepare an emergency evacuation plan for review and approval by the fire code official, post the evacuation plan in a conspicuous location in each classroom, and instruct all supervisory personnel and all students in the evacuation procedures.
4. Group H.
5. Group I.
6. Group R-1.
7. Group R-2 college and university buildings.
8. Group R-4.
9. High-rise buildings. Fire safety and evacuation plans for high-rise buildings shall be in accordance with Section I103 of Appendix I.
10. Group M buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
11. Covered malls exceeding 50,000 square feet (4645 m<sup>2</sup>) in aggregate floor area.
12. Underground buildings.
13. Buildings with an atrium and having an occupancy in Group A, E or M.”

70. Paragraph 404.3.2, “Fire Safety Plans,” of Subsection 404.3, “Contents,” of Section 404, “Fire Safety and Evacuation Plans,” of Chapter 4, “Emergency Planning and Preparedness,” of the 2006 International Fire Code is amended to read as follows:

**“404.3.2 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 and procedures for notifying, relocating, or evacuating occupants.
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.
  - 4.5. Areas of refuge.
  - 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.”

71. Subsection 405.1, “General,” of Section 405, “Emergency Evacuation Drills,” of Chapter 4, “Emergency Planning and Preparedness,” of the 2006 International Fire Code is amended to read as follows:

**“405.1 General.** Emergency evacuation drills complying with the provisions of this section shall be conducted at least annually in the occupancies listed in Table 405.2 [~~Section 404.2~~] or when required by the fire code official. Drills shall be designed in cooperation with the local authorities.”

72. 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 2006 International Fire Code is amended to read as follows:

**“TABLE 405.2  
FIRE AND EVACUATION DRILL  
FREQUENCY AND PARTICIPATION**

<b>GROUP OCCUPANCY</b>	<b>OR</b>	<b>FREQUENCY</b>	<b>PARTICIPATION</b>
Group A		Quarterly	Employees
Group B <sup>c</sup>		Annually	Employees
Group E		Monthly <sup>a</sup>	All occupants
Group I		Quarterly on each shift	Employees <sup>b</sup>
Group R-1		Quarterly on each shift	Employees
Group R-2 <sup>d</sup>		Four annually	All occupants
Group R-4		Quarterly on each shift	Employees <sup>b</sup>
High-rise buildings		<u>Quarterly</u> [ <del>Annually</del> ]	Employees <u>and all occupants</u>

- a. The frequency shall be allowed to be modified in accordance with Section 408.3.2.
- b. Fire and evacuation drills in residential care assisted living facilities shall include complete evacuation of the premises in accordance with Section 408.10.5. Where occupants receive habilitation or rehabilitation training, fire prevention and fire safety practices shall be included as part of the training program.
- c. 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.
- d. Applicable to Group R-2 college and university buildings in accordance with Section 408.3.

73. Subsection 405.2, “Frequency,” of Section 405, “Emergency Evacuation Drills,” of Chapter 4, “Emergency Planning and Preparedness,” of the 2006 International Fire Code is amended by adding a new Paragraph 405.2.1, “Drills Required by the Fire Chief,” to read as follows:

**“405.2.1 Drills required by the fire chief.** The fire code official may require a fire drill at any time.”

74. Subsection 408.1, “General,” of Section 408, “Use and Occupancy-Related Requirements,” of Chapter 4, “Emergency Planning and Preparedness,” of the 2006 International Fire Code is amended by adding a new Paragraph 408.1.1, “Warning Signs,” to read as follows:

**“408.1.1 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 which bear the prohibition of Section 408 of this division in its entirety and which states as follows: ANY PERSON WHO CAUSES THE ACCIDENTAL BURNING OF ANY PART OF THIS BUILDING OR ITS CONTENTS IS SUBJECT TO A FINE OF \$2,000. CITY OF DALLAS FIRE CODE.”

75. Paragraph 408.8.1, “Evacuation Diagrams,” of Subsection 408.8, “Group R-1 Occupancies,” of Section 408, “Use and Occupancy-Related Requirements,” of Chapter 4, “Emergency Planning and Preparedness,” of the 2006 International Fire Code is amended to read as follows:

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

1. A description of the fire alarm system and an explanation of its operation (including the meaning of signals).
2. A map showing all emergency exit locations and how they are designated.
3. Information on how to report a fire or other emergency to the Dallas Fire-

Rescue Department and/or building management.

4. A warning not to use elevators in case of fire.
5. General instructions as to self-protective measures a person should take if trapped in a room by fire or smoke.

76. Paragraph 408.11.3, “Maintenance,” of Subsection 408.11, “Covered Mall Buildings,” of Section 408, “Use and Occupancy-Related Requirements,” of Chapter 4, “Emergency Planning and Preparedness,” of the 2006 International Fire Code is amended to read as follows:

**“408.11.3 Maintenance.** Unoccupied tenant spaces shall be:

1. ~~[Kept free from the storage of any materials.]~~
- ~~[2.]~~ Separated from the remainder of the building by partitions of at least 0.5-inch-thick (12.7 mm) gypsum board or an approved equivalent to the underside of the ceiling of the adjoining tenant spaces.
- ~~2[3].~~ Without doors or other access openings other than one door that shall be kept key locked in the closed position except during that time when opened for inspection.
- ~~3[4].~~ Kept free from combustible waste and be broom-swept clean.”

77. Subsection 501.3, “Construction Documents,” of Section 501, “General,” of Chapter 5, “Fire Service Features,” of the 2006 International Fire Code is amended to read as follows:

**“501.3 Construction documents.** Construction documents for proposed fire apparatus access, location of fire lanes, ~~[and construction documents and hydraulic calculations for]~~ fire hydrant systems and for limited access gates which obstruct fire apparatus access roads (in accordance with Section I104, ‘Limited Access Gates’ of Appendix I) shall be submitted to the fire department for review and approval prior to construction.

**501.3.1 Plan review fees.** Plans for fire apparatus access roads (in accordance with Section 503 and Appendix D) shall be accompanied by a nonrefundable \$75 review fee. This shall apply 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 which obstruct fire apparatus access roads (in accordance with Section I104, 'Limited Access Gates' of Appendix I) shall be accompanied by a nonrefundable \$75 review fee. This plan review fee shall apply to new and existing construction."

78. Subsection 501.4, "Timing of Installation," of Section 501, "General," of Chapter 5, "Fire Service Features," of the 2006 International Fire Code is amended to read as follows:

**"501.4 Timing of installation.** When fire apparatus access roads or a water supply for fire protection, including fire hydrants, is required to be installed, 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 when construction of new roadways allows passage by vehicles in accordance with Section 505.2."

79. Section 503, "Fire Apparatus Access Roads," of Chapter 5, "Fire Service Features," of the 2006 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 hose connection. Provisions of this section may be modified by the fire chief. See also Section 912. Also see Section 504.1 for personnel access to buildings.

**Exception:** The fire chief [~~code official~~] is authorized to increase the dimension of 150 feet (45 720 mm) where:

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.
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.
3. There are not more than two Group R-3 or Group U occupancies.

**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 23.

**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 1410.1.

**503.2 Specifications.** Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.7.

**503.2.1 Dimensions.** Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), 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 and vertical clearances where they are inadequate for fire or rescue operations.

**503.2.3 Surface.** Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be of concrete or asphalt [surfaced] so as to provide all-weather driving capabilities. All other driving surfaces shall receive approval by the fire chief before installation.

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

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

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

**503.3 Marking.** Approved striping, or when allowed [Where required] by the fire code official, [approved] signs, or both [other approved notices] shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Signs and striping [or notices] shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

1. Striping – Fire apparatus access roads shall be marked by painted lines of red traffic paint 6 inches (152 mm) in width to show the boundaries of the lane. The words NO PARKING FIRE LANE or FIRE LANE NO PARKING shall appear in 4-inch (102 mm) white letters at 25-foot (7620 mm) intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.
2. Signs – Signs shall read NO PARKING FIRE LANE or FIRE LANE NO PARKING and shall be 12 inches (305 mm) wide and 18 inches (457 mm) high. Signs shall be painted on a white background with letters and borders in red, using not less than 2-inch (51 mm) lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be 6 feet, 6 inches (1981 mm) above finished grade. Signs shall be spaced not more than 50 feet (15 240 mm) apart. Signs may be installed on permanent buildings or walls or as approved by

the fire 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 Section 503.2.1, 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 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.

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

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

**503.6 Limited access [~~Security~~] gates.** The installation of limited access [~~security~~] gates across a fire apparatus access road shall be approved by the fire chief. Where limited access [~~security~~] gates are installed, they shall have an approved means of emergency operation in accordance with Section I104, 'Limited Access Gates,' of Appendix I. The limited access [~~security~~] gates and the emergency operation shall be maintained operational at all times in accordance with Section I104, 'Limited Access Gates,' of Appendix I."

80. Subsection 504.3, “Stairway Access to Roof,” of Section 504, “Access to Building Openings and Roofs,” of Chapter 5, “Fire Service Features,” of the 2006 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.”

81. Section 506, “Key Boxes,” of Chapter 5, “Fire Service Features,” of the 2006 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 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. Where access to or within any other 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.

**Exception:** The owner shall have the option to place a key box on the exterior of the building.

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

**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 Construction.** Key boxes shall be constructed of not less than ¼-inch steel plate, contain a high-security lock and utilize the keys which conform to the fire department key code.

**506.4 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 10 feet (3048 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 10 feet (3048 mm) and not less than 42 inches (1067 mm) above the main entrance level of the building. The fire code official may approve alternate locations.

**506.5 Contents.** Exterior key boxes shall contain keys to gain access 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:

1. Elevator keys capable of accessing all floors in the building.
2. Stairway keys.
3. Fire control station keys.
4. Alarm system keys.”

82. Subsection 508.2, “Type of Water Supply,” of Section 508, “Fire Protection Water Supplies,” of Chapter 5, “Fire Service Features,” of the 2006 International Fire Code is amended to read as follows:

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

**508.2.1.1 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.

**508.2.2 Water tanks.** Water tanks for private fire protection shall be installed in accordance with NFPA 22.”

83. Subsection 508.3, “Fire Flow,” of Section 508, “Fire Protection Water Supplies,” of Chapter 5, “Fire Service Features,” of the 2006 International Fire Code is amended to read as follows:

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

84. Subsection 508.5, “Fire Hydrant Systems,” of Section 508, “Fire Protection Water Supplies,” of Chapter 5, “Fire Service Features,” of the 2006 International Fire Code is amended to read as follows:

**“508.5 Fire hydrant systems.** Fire hydrant systems shall comply with Sections 508.5.1 through 508.5.8[6] and Appendix C, ‘Fire Hydrant Locations and Distribution.’”

85. Paragraph 508.5.1, “Where Required,” of Subsection 508.5, “Fire Hydrant Systems,” of Section 508, “Fire Protection Water Supplies,” of Chapter 5, “Fire Service Features,” of the 2006 International Fire Code is amended to read as follows:

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

**Exceptions:**

1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).
2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).
3. Buildings or facilities of noncombustible construction less than 500 square feet (46.45 m<sup>2</sup>).

**508.5.1.1 Location of fire department hose connections.** A fire hydrant shall be located within 400 feet (122 m) of all fire department hose connections.”

86. Subsection 508.5, “Fire Hydrant Systems,” of Section 508, “Fire Protection Water Supplies,” of Chapter 5, “Fire Service Features,” of the 2006 International Fire Code is amended by adding a new Paragraph 508.5.7, “Hydrant Color Coding,” to read as follows:

**“508.5.7 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.

Public hydrant barrels shall be silver. Private hydrant barrels shall be kelly green..”

87. Subsection 508.5, “Fire Hydrant Systems,” of Section 508, “Fire Protection Water Supplies,” of Chapter 5, “Fire Service Features,” of the 2006 International Fire Code is amended by adding a new Paragraph 508.5.8, “Location,” to read as follows:

**“508.5.8 Location.** Fire hydrants shall be located a minimum of 2½ feet (762 mm) and a maximum of 7½ feet (2286 mm) from the edge of fire apparatus access roads.”

88. Section 509, “Fire Command Center,” of Chapter 5, “Fire Service Features,” of the 2006 International Fire Code is amended to read as follows:

**“509.1 Features.** Where required by other sections of this code and in all buildings classified as high-rise buildings by the Dallas [~~International~~] *Building Code*, a fire command center for fire department operations shall be provided. The location and accessibility of the fire command center shall be approved by the fire department. 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 706 of the Dallas [~~International~~] *Building Code* or horizontal assembly constructed in accordance with Section 711 of the Dallas [~~International~~] *Building Code*, or both. The room shall be a minimum of 96 square feet (9 m<sup>2</sup>) with a minimum dimension of 8 feet (2438 mm). 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. The fire command center shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system unit.
2. [~~The fire department communications system.~~]

- ~~[3-]~~ Fire-detection and alarm system annunciator system.
- ~~3~~[4]. Annunciator visually indicating the location of the elevators and whether they are operational.
- ~~[5-]~~ ~~Status indicators and controls for air handling systems.]~~
- ~~4~~[6]. The fire-fighter's control panel required by Section 909.16 for smoke control systems installed in the building.
- ~~5~~[7]. Controls for unlocking stairway doors simultaneously.
- ~~6~~[8]. Sprinkler valve and water-flow detector display panels.
- ~~7~~[9]. Emergency and standby power status indicators.
- ~~8~~[10]. A telephone for fire department use with controlled access to the public telephone system.
- ~~9~~[11]. Fire pump status indicators.
- ~~10~~[2]. 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.
- ~~11~~[3]. Work table.
- ~~12~~[4]. Generator supervision devices, manual start and transfer features.
- ~~13~~[5]. Public address system, where specifically required by other sections of this code.

**509.2 Emergency Radio Communications.** In all new and existing buildings in which the type of construction or distance from an operational emergency services antenna or dispatch site does not provide adequate frequency or signal strength as determined by the fire code official, the building owner shall be responsible for providing the equipment, installation and maintenance of said equipment in a manner to strengthen the radio signal. The radio signal shall meet the minimum input/output strengths according to the emergency radio system's provider and system manager. Existing buildings shall comply with this regulation by June 1, 2008."

89. Subsection 603.4, "Portable Unvented Heaters," of Section 603, "Fuel-Fired Appliances," of Chapter 6, "Building Services and Systems," of the 2006 International Fire Code is amended to read as follows:

**“603.4 Portable unvented heaters.** Portable unvented fuel-fired heating equipment shall be prohibited in occupancies in Groups A, E, I, R-1, R-2, R-3 and R-4.

**Exceptions:**

1. Listed and approved unvented fuel-fired heaters in one- and two-family dwellings.
2. Appliances approved for temporary use during construction processes are allowed, provided such capacity does not exceed the terms of the listing of the appliance.”

90. Subsection 605.10, “Portable, Electric Space Heaters,” of Section 605, “Electrical Equipment, Wiring and Hazards,” of Chapter 6, “Building Services and Systems,” of the 2006 International Fire Code is amended to read as follows:

**“605.10 Portable, electric space heaters.** Portable, electric space heaters shall comply with Sections 605.10.1 through 605.10.4. Owners of the portable, electric space heaters shall be responsible for compliance.

**605.10.1 Listed and labeled.** Only listed and labeled portable, electric space heaters shall be used.

**605.10.2 Power supply.** Portable, electric space heaters shall be plugged directly into an approved receptacle.

**605.10.3 Extension cords.** Portable, electric space heaters shall not be plugged into extension cords.

**605.10.4 Prohibited areas.** Portable, electric space heaters shall not be operated within 3 feet (914 mm) of any combustible materials. Portable, electric space heaters shall be operated only in locations for which they are listed.”

91. Section 607, “Elevator Recall and Maintenance,” of Chapter 6, “Building Services and Systems,” of the 2006 International Fire Code is amended to read as follows:

**“607.1 Required.** Existing elevators with a travel distance of 25 feet (7620 mm) or more above or below the main floor or other level of a building and intended to serve the needs of emergency personnel for fire-fighting or rescue purposes shall be provided with emergency operation in accordance with ASME A17.3. New elevators shall be provided with Phase I emergency recall operation and Phase II emergency in-car operation in accordance with ASME A17.1.

**[B] 607.2 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. The emergency sign shall not be required for elevators that are part of an accessible means of egress complying with Section 1007.4.

**607.3 Elevator keys.** Keys for the elevator car doors and fire-fighter service keys shall be kept in an approved location for immediate use by the fire department.

**607.4 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.

92. Chapter 6, “Building Services and Systems,” of the 2006 International Fire Code is amended by adding a new Section 610, “Housekeeping,” to read as follows:

## **“SECTION 610 HOUSEKEEPING**

**610.1 General.** Hoods, surfaces, grease-removal devices, fans, ducts and other appurtenances of cooking equipment shall be cleaned at intervals necessary to prevent the accumulation of grease.

93. Subsection 704.1, “Enclosure,” of Section 704, “Floor Openings and Shafts,” of Chapter 7, “Fire-Resistance-Rated Construction,” of the 2006 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 specified in Table 704.1.”

94. Subsection 704.2, “Opening Protectives,” of Section 704, “Floor Openings and Shafts,” of Chapter 7, “Fire-Resistance-Rated Construction,” of the 2006

International Fire Code is amended to read as follows:

**“704.2 Opening protectives.** When openings are required to be protected, opening protectives shall be maintained self-closing or automatic-closing by smoke detection. Existing fusible-link-type automatic door-closing devices are permitted if the fusible link rating does not exceed 135°F (57°C). In cases where this section conflicts with the Dallas Building Code or the Dallas Existing Building Code, compliance shall be in accordance with the Dallas Building Code or the Dallas Existing Building Code.”

95. Section 803, “Interior Wall and Ceiling Finish and Trim in Existing Buildings,” of Chapter 8, “Interior Finish, Decorative Materials and Furnishings,” of the 2006 International Fire Code is amended by adding a new Subsection 803.8, “Nonfoam Plastics,” to read as follows:

**“803.8 Nonfoam plastics.** Plastic materials other than foam plastics shall be flame resistant or shall be rendered flame resistant by treating them with a flame-retardant coating.”

96. Section 804, “Interior Wall and Ceiling Trim in New and Existing Buildings,” of Chapter 8, “Interior Finish, Decorative Materials and Furnishings,” of the 2006 International Fire Code is amended by adding a new Subsection 804.3, “Nonfoam Plastics,” to read as follows:

**“804.3 Nonfoam plastics.** Plastic materials other than foam plastics shall be flame resistant or shall be rendered flame resistant by treating them with a flame-retardant coating.”

97. Subparagraph 807.4.3.2, “Artwork,” of Paragraph 807.4.3, “Group E,” of Subsection 807.4, “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 2006 International Fire Code is amended to read as follows:

**“807.4.3.2 Artwork.** Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area.

**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.

98. Subparagraph 807.4.4.2, “Artwork,” of Paragraph 807.4.4, “Group I-4, Day Care Facilities,” of Subsection 807.4, “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 2006 International Fire Code is amended to read as follows:

**807.4.4.2 Artwork.** Artwork and teaching materials shall be limited on walls of corridors to not more than 20 percent of the wall area.

**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.

99. Section 807, “Decorative Materials Other Than Decorative Vegetation in New and Existing Buildings,” of Chapter 8, “Interior Finish, Decorative Materials and Furnishings,” of the 2006 International Fire Code is amended by adding a new Subsection 807.5, “Nonfoam Plastics,” to read as follows:

**“807.5 Nonfoam plastics.** Plastic materials other than foam plastics shall be flame resistant or shall be rendered flame resistant by treating them with a flame-retardant coating.”

100. Subsection 901.3, “Permits,” of Section 901, “General,” of Chapter 9, “Fire Protection Systems,” of the 2006 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 department 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.

**901.3.2 Plan review fees.** Plans for fire alarm systems shall be accompanied by a nonrefundable review fee based on the following:

1. \$75 for each fire alarm system, per building, with a total of 10 or fewer alarm initiating or signaling devices.
2. \$100 for each fire alarm system, per building, with a total of more than 10 but fewer than 26 alarm initiating or signaling devices.
3. \$150 for each fire alarm system, per building, with a total of more than 25 but fewer than 151 alarm initiating or signaling devices.
4. \$300 for each fire alarm system, per building, with a total of 151 or more alarm initiating or signaling devices.”

101. 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 2006 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 Dallas [~~International~~] *Building Code* shall be installed, repaired, operated, tested and maintained in accordance with this code and nationally recognized standards.”

102. 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 2006 International Fire Code is amended to read as follows:

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

103. Subsection 901.5, "Installation Acceptance Testing," of Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2006 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 witness ~~[be notified before]~~ any required acceptance testing.

A retest fee shall be charged for retesting fire protection systems when the testing of the system fails after the contractor has submitted to the fire code official a pre-test certification certifying that the system has been pre-tested and is in an approved condition. The retest fee shall be \$500.00."

104. Subsection 901.6, "Inspection, Testing and Maintenance," of Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2006 International Fire Code is amended to read as follows:

**"901.6 Inspection, testing and maintenance.** In accordance with Section 311.2.2, ~~f[F]~~ire detection, alarm and extinguishing systems 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."

105. 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 2006 International Fire Code is amended by adding 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 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 as 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.

106. Subsection 901.7, "Systems Out of Service," of Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2006 International Fire Code is amended to read as follows:

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

Where utilized, standby personnel [~~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.”

107. 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 2006 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 official, if required, to verify that affected systems are operational.
2. Supervisors have been advised that protection is restored.
3. The fire department has been advised that protection is restored.
4. The building owner/manager, insurance carrier, alarm company, and other involved parties have been advised that protection is restored.
5. All [~~The~~] impairment tags have [~~has~~] been removed.”

108. Subsection 902.1, “Definitions,” of Section 902, “Definitions,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding or amending the following definitions in alphabetical order:

**“[B] FIRE AREA.** The aggregate floor area enclosed and bounded by approved fire walls, fire barriers, exterior walls, or fire-resistance-rated horizontal assemblies of a building.

**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 7½ threads per inch.

**PATH OF EGRESS.** Any exit, exit corridor, intervening room, top of stairway, and all areas open to a stairway or exterior door.

**SPECIAL AMUSEMENT BUILDING.** A building or portion thereof, temporary or permanent, used for entertainment or educational purposes and which contains a system

which transports passengers or provides a walkway through a course so arranged that the required means of egress are not apparent due to theatrical distractions, are disguised or are not readily available due to the method of transportation through the building or structure. The term includes a haunted house, a roller coaster-type ride within a building, a merry-go-round within a building, a submarine ride and similar amusements where the occupants are not in the open air.

**STANDPIPE, TYPES OF.** Standpipe types are as follows:

**Automatic dry.** A dry standpipe system, normally filled with pressurized air, that is arranged through the use of a device, such as a dry pipe valve, to admit water into the system piping automatically upon the opening of a hose valve. The water supply for an automatic dry standpipe system shall be capable of supplying the system demand.

**Automatic wet.** A wet standpipe system that has a water supply that is capable of supplying the system demand automatically.

**Manual dry.** A dry standpipe system that does not have a permanent water supply attached to the system. Manual dry standpipe systems require water from a fire department pumper to be pumped into the system through the fire department connection in order to supply the system demand. The system shall be supervised as specified in Section 905.2.

**Manual wet.** A wet standpipe system connected to a water supply for the purpose of maintaining water within the system but which does not have a water supply capable of delivering the system demand attached to the system. Manual wet standpipe systems require water from a fire department pumper (or the like) to be pumped into the system in order to supply the system demand.

**Semiautomatic dry.** A dry standpipe system that is arranged through the use of a device, such as a deluge valve, to admit water into the system piping upon activation of a remote control device located at a hose connection. A remote control activation device shall be provided at each hose connection. The water supply for a semiautomatic dry standpipe system shall be capable of supplying the system demand.”

109. Subsection 903.1, “General,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Paragraph 903.1.2, “Separation,” to read as follows:

**“903.1.2 Separation.** Areas of buildings protected by automatic sprinklers shall be separated from unsprinklered areas by fire barriers complying with Section 706 of the *Dallas Building Code* having a minimum fire-resistance rating of 2 hours.”

110. Subsection 903.2, “Where Required,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 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 this section.

~~[**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 fire alarm system and are separated from the remainder of the building by fire barriers consisting of not less than 1-hour fire-resistance-rated walls and 2-hour fire-resistance-rated floor/ceiling assemblies.]]”~~

111. Paragraph 903.2.8, “Group S-1,” of Subsection 903.2, “Where Required,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Subparagraph 903.2.8.3, “Self-Service Storage Facility,” to read as follows:

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

**Exception:** One-story self-service storage facilities that have no interior corridors, with a 1-hour fire barrier separation wall installed between every storage compartment.”

112. Subparagraph 903.2.10.3, “Buildings More Than 55 Feet in Height,” of Paragraph 903.2.10, “Windowless Stories in All Occupancies,” of Subsection 903.2, “Where Required,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“903.2.10.3 Buildings 55 feet or more in height.** An automatic sprinkler system shall be installed throughout buildings with a floor level, other than penthouses in compliance with Section 1509 of the *Dallas Building Code*, [having an occupant load of 30 or more] that is located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access.

**Exception[s]:**

~~[1. Airport control towers.]~~

~~[2.] Open parking structures in compliance with Section 406.3 of the Dallas Building Code.~~

~~[3. Occupancies in Group F-2.]”~~

113. Paragraph 903.2.10, “Windowless Stories In All Occupancies,” of Subsection 903.2, “Where Required,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Subparagraph 903.2.10.4, “High-Piled Combustible Storage,” to read as follows:

**“903.2.10.4 High-piled combustible storage.** For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 23 to determine if those provisions apply.”

114. Paragraph 903.2.10, “Windowless Stories In All Occupancies,” of Subsection 903.2, “Where Required,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Subparagraph 903.2.10.5, “Spray Booths and Rooms,” to read as follows:

**“903.2.10.5 Spray booths and rooms.** New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.”

115. Subsection 903.2, “Where Required,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Paragraph 903.2.14, “Group R-3,” to read as follows:

**“903.2.14 Group R-3.** An automatic sprinkler system shall be installed in accordance with NFPA 13D when required by this code.

**903.2.14.1 Additional required suppression systems.** An approved automatic sprinkler system shall be installed throughout the building in dwellings in which the total unsprinklered building area exceeds 7,500 square feet (697 m<sup>2</sup>).

**Exceptions:**

1. Dwellings that are separated into fire areas no greater than 7,500 square feet (697 m<sup>2</sup>) 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.

**903.2.14.2 Draftstop requirements.** Draftstopping shall be installed in attics and concealed roof spaces, such that any horizontal area does not exceed 9,000 square feet (836 m<sup>2</sup>).

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

116. 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 2006 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, 903.3.1.2 or 903.3.1.3.

**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 Section 903.3.1.1.1.

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

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. Generator and transformer rooms under the direct control of a public utility separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
- ~~[4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.]~~

**903.3.1.1.2 Residential systems.** Residential sprinkler systems installed in accordance with Sections 903.3.1.2 and 903.3.1.3 shall be recognized for the purposes of exceptions or reductions, commonly referred to as ‘trade-offs’, permitted by other requirements of this code.

**903.3.1.2 NFPA 13R sprinkler systems.** Where allowed in buildings of Group R, up to and including four stories in height, automatic sprinkler systems shall 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 903.3.1.1.2.

**903.3.1.2.1 Balconies.** Sprinkler protection shall be provided for exterior balconies, decks, and ground floor patios of dwelling units where the building is of Type V construction. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25 mm) to 6 inches (152 mm) below the structural members, and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

**903.3.1.3 NFPA 13D sprinkler systems.** Where allowed, automatic sprinkler systems installed in one- and two-family dwellings shall be installed throughout in accordance with NFPA 13D. Refer also to Section 903.3.1.1.2.”

117. 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 2006 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. 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.”

118. Paragraph 903.3.6, “Hose Threads,” of Subsection 903.3, “Installation Requirements,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“903.3.6 Hose threads.** Fire hose threads and fittings used in connection with automatic sprinkler systems shall be as prescribed by the fire code official. Fire hose threads used in connection with fire-extinguishing systems shall be 2½-inch (64 mm) outlets and shall have 7½ national standard fire hose coupling screw threads per inch.”

119. Paragraph 903.3.7, “Fire Department Connections,” of Subsection 903.3, “Installation Requirements,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“903.3.7 Fire department connections.** The location of fire department connections shall be in accordance with Section 912 ~~[approved by the fire code official]~~.”

120. Subsection 903.4, “Sprinkler System Monitoring and Alarms,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“903.4 Sprinkler system monitoring and alarms.** All valves on the building side of the water meter 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.

**Exceptions:**

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

2. Limited area systems serving fewer than 20 sprinklers.
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 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.

121. Paragraph 903.4.2, “Alarms,” of Subsection 903.4, “Sprinkler System Monitoring and Alarms,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“903.4.2 Alarms.** Approved audible devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location near the fire department connection. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.”

122. Subsection 903.6, “Existing Buildings,” of Section 903, “Automatic Sprinkler Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International

Fire Code is amended by adding a new Paragraph 903.6.2, "Spray Booths and Rooms," to read as follows:

**"903.6.2 Spray booths and rooms.** New and existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 1504."

123. Subsection 904.1, "General," of Section 904, "Alternative Automatic Fire-Extinguishing Systems," of Chapter 9, "Fire Protection Systems," of the 2006 International Fire Code is amended by adding a new Paragraph 904.1.1, "Separation," to read as follows:

**"904.1.1 Separation.** Areas of buildings protected by an automatic fire-extinguishing system shall be separated from unprotected areas by fire barriers complying with Section 706 of the *Dallas Building Code* having a minimum fire-resistance rating of 2 hours.

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

124. Paragraph 904.11.5, "Portable Fire Extinguishers for Commercial Cooking Equipment," of Subsection 904.11, "Commercial Cooking Systems," of Section 904, "Alternative Automatic Fire-Extinguishing Systems," of Chapter 9, "Fire Protection Systems," of the 2006 International Fire Code is amended to read as follows:

**"904.11.5 Portable fire extinguishers for commercial cooking equipment.** Portable fire extinguishers shall be provided within a 30-foot (9144 mm) travel distance of commercial-type cooking equipment. Cooking equipment involving vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher.

**Exception:** Existing 40 BC fire extinguishers installed prior to the adoption of this code that are serviceable and maintained shall be permitted."

125. Subsection 905.2, "Installation Standard," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the 2006 International Fire Code is amended to read as follows:

**“905.2 Installation standard.** Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig (69 kPa) and a maximum of 40 psig (276 kPa) air pressure with a high/low alarm.”

126. 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 2006 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 where the highest floor surface used for human occupancy is 75 feet (22 860 mm) or less above the lowest level of fire department vehicle access.]”~~

127. Subsection 905.4, “Location of Class I Standpipe Hose Connections,” of Section 905, “Standpipe Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 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 stairway, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at an intermediate floor level landing between floors, 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 exit stairway hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30480 mm) of hose, a hose connection shall not be required at the horizontal exit.
3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

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.
5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way hose connection located either on the roof or at the highest landing of a stairway with stair access to the roof. An additional hose connection shall be provided at the top of the most hydraulically remote standpipe for testing purposes.
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.”

128. Subsection 905.4, “Location of Class I Standpipe Hose Connections,” of Section 905, “Standpipe Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 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.”

129. Subsection 905.9, “Valve Supervision,” of Section 905, “Standpipe Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

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

**Exceptions:**

1. Valves to underground key or hub valves in roadway boxes provided by the municipality or public utility do not require supervision.

2. Valves locked in the normal position and inspected as provided in this code in buildings not equipped with a fire alarm system.

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

130. Footnote c to Table 906.3(1), “Fire Extinguishers for Class A Fire Hazards,” of Subsection 906.3, “Size and Distribution,” of Section 906, “Portable Fire Extinguishers,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is deleted.

131. Paragraph 907.1.2, “Equipment,” of Subsection 907.1, “General,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“907.1.2 Equipment.** Systems and their 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.”

132. Paragraph 907.1.2, “Equipment,” of Subsection 907.1, “General,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a Subparagraph 907.1.2.1, “Prohibited equipment,” to read as follows:

**“907.1.2.1 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 in the city of Dallas.”

133. Subsection 907.1, “General,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Paragraph 907.1.3, “Design Standards,” to read as follows:

**“907.1.3 Design standards.** All new or replaced fire alarm systems shall comply with the requirements of Section 907. Fire alarm systems serving 50 or more alarm actuating devices shall be addressable fire detection systems. Alarm systems serving more than 75 smoke detectors or more than 200 total alarm activating devices shall be analog intelligent addressable fire detection systems.

**Exception:** Existing systems need not comply unless the total building remodel or expansion initiated after the effective date of this code, as adopted, exceeds 30 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.”

134. Subsection 907.1, “General,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Paragraph 907.1.4, “Area Separation Walls/Fire Walls,” to read as follows:

**“907.1.4 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.”

135. 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 2006 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, shall be installed in Group A occupancies having an occupant load of 300 or more. 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, and automatic fire detection in paths of egress, are not required where the building is equipped throughout with an automatic sprinkler system and the alarm notification appliances will activate upon sprinkler water flow.”

136. 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 2006 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 having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

**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 and the alarm notification appliances will activate upon sprinkler water flow.”

137. 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 2006 International Fire Code is amended to read as follows:

**“907.2.3 Group E.** A manual fire alarm system shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100 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. Group E educational and day care occupancies with an occupant load of less than 50 when provided with an approved automatic sprinkler system.
2. Manual fire alarm boxes are not required in Group E occupancies where all the following apply:
  - 2.1. Interior corridors are protected by smoke detectors with alarm verification.

- 2.2. Auditoriums, cafeterias, gymnasiums and the like are protected by heat detectors or other approved detection devices.
  - 2.3. Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.
  - 2.4. Off-premises monitoring is provided.
  - 2.5. The capability to activate the evacuation signal from a central point is provided.
  - 2.6. In buildings where normally occupied spaces are provided with a two-way communication system between such spaces and a constantly attended receiving station from where a general evacuation alarm can be sounded, except in locations specifically designated by the fire code official.
- 3. Manual fire alarm boxes shall not be required in Group E occupancies where the building is equipped throughout with an approved automatic sprinkler system, the notification appliances will activate on sprinkler water flow and 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 2½ or less years of age, see Section 907.2.6).

**907.2.3.1 Exterior alarm-signaling device.** An alarm-signaling device shall be mounted on the exterior of the building.”

138. 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 2006 International Fire Code is amended to read as follows:

**“907.2.7 Group M.** A manual fire alarm system, and an automatic fire detection system in paths of egress, shall be installed in Group M occupancies having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge. The initiation of a signal from a manual fire alarm box shall initiate alarm notification appliances as required by Section 907.10.

**Exceptions:**

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

139. Paragraph 907.2.10, “Single- and Multiple-Station Smoke Alarms,” 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 2006 International Fire Code is amended to read as follows:

**“907.2.10 Single- and multiple-station smoke alarms.** Listed single- and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with the provisions of this code and the household fire-warning equipment provisions of NFPA 72. System smoke detectors may be allowed in lieu of single- or multiple-station smoke detectors provided they are equipped with integral notification and report to the fire alarm panel as supervisory alarms.”

140. Paragraph 907.2.12, “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 2006 International Fire Code is amended to read as follows:

**“907.2.12 High-rise buildings.** 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 fire alarm system and an emergency voice/alarm communication system in accordance with Section 907.2.12.2.

**Exceptions:**

1. Airport traffic control towers in accordance with Section 907.2.12.2 [~~907.2.22~~] and Section 412 of the Dallas [~~International~~] *Building Code*.
2. Open parking garages in accordance with Section 406.3 of the Dallas [~~International~~] *Building Code*.

3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the Dallas ~~[International]~~ *Building Code* when used for open air seating; however, this exception does not apply to accessory use areas, including, but not limited to, skyboxes, restaurants and similarly enclosed areas.
4. Low-hazard special occupancies in accordance with Section 503.1.3 ~~[503.1.1]~~ of the Dallas ~~[International]~~ *Building Code*.
5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415 of the Dallas ~~[International]~~ *Building Code*.

**907.2.12.1 Automatic fire detection.** 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 operate the emergency voice/alarm communication system. Smoke detectors shall be located as follows:

1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room which is not provided with sprinkler protection, elevator machine rooms, and in elevator lobbies.
2. 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 m<sup>3</sup>/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet. 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.
3. ~~[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 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~~[, a listed 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].~~

**907.2.12.2 Emergency voice/alarm communication system.** The operation of any automatic fire detector, sprinkler water-flow 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 on a minimum of 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 in accordance with the building's fire safety and evacuation plans required by Section 404. Speakers shall be provided throughout the building by paging zones. As a minimum, paging zones shall be provided as follows:

1. Elevator groups.
2. Exit stairways.
3. Each floor.
4. Areas of refuge as defined in Section 1002.1.

**Exception:** In Group I-1 and I-2 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

**907.2.12.2.1 Manual override.** A manual override for emergency voice communication shall be provided on a selective and all-call basis for all paging zones.

**907.2.12.2.2 Live voice messages.** The emergency voice/alarm communication system shall also have the capability to broadcast live voice messages through paging zones on a selective and all-call basis.

**907.2.12.2.3 Standard.** The emergency voice/alarm communication system shall be designed and installed in accordance with NFPA 72.

~~[907.2.12.3 Fire department communication system. An approved two way, fire department communication system designed and installed in accordance with NFPA 72 shall be provided for fire department use. It shall operate between a fire command center complying with Section 509 and elevators, elevator lobbies, emergency and standby power rooms, fire pump rooms, areas of refuge and inside enclosed exit stairways. The fire department communication device shall be provided at each floor level within the enclosed exit stairway.~~

~~**Exception:** Fire department radio systems where approved by the fire department.]”~~

141. Paragraph 907.3.1, “Occupancy Requirements,” of Subsection 907.3, “Where Required—Retroactive in Existing Buildings and Structures,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“907.3.1 Occupancy requirements.** A fire alarm system shall be installed in accordance with Sections 907.3.1.1 through 907.3.1.11[8].

**Exception:** Occupancies with an existing, previously approved fire alarm system.

A fire alarm system shall be installed in existing Group A occupancies in accordance with Section 907.2.1.

**Exception:** Group A-5 occupancies.”

142. Subparagraph 907.3.1.1, “Group E,” of Paragraph 907.3.1, “Occupancy Requirements,” of Subsection 907.3, “Where Required—Retroactive in Existing Buildings and Structures,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“907.3.1.1 Group E.** A fire alarm system shall be installed in existing Group E occupancies in accordance with Section 907.2.3.

**Exception[s]:**

~~[1. A building with a maximum area of 1,000 square feet (93 m<sup>2</sup>) that contains a single classroom and is located no closer than 50 feet (15 240 mm) from another building.~~

~~2.] Group E with an occupant load less than 50.”~~

143. Paragraph 907.3.1, “Occupancy Requirements,” of Subsection 907.3, “Where Required—Retroactive in Existing Buildings and Structures,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Subparagraph 907.3.1.9, “High-Rise,” to read as follows:

**“907.3.1.9 High-rise.** A fire alarm system shall be installed in existing high-rise buildings in accordance with Section 907.2.12.

**Exception:** High-rise buildings built prior to April 30, 1974, and not provided throughout with an automatic sprinkler system shall be provided with a fire alarm system in accordance with Section 907.2.2.”

144. Paragraph 907.3.1, “Occupancy Requirements,” of Subsection 907.3, “Where Required—Retroactive in Existing Buildings and Structures,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Subparagraph 907.3.1.10, “Group B,” to read as follows:

**“907.3.1.10 Group B.** A fire alarm system shall be installed in existing Group B occupancies in accordance with Section 907.2.2.

**Exception:** High-rise buildings meeting the area of refuge requirements of the applicable building code adopted at the time the building was built.”

145. Paragraph 907.3.1, “Occupancy Requirements,” of Subsection 907.3, “Where Required—Retroactive in Existing Buildings and Structures,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Subparagraph 907.3.1.11, “Group M,” to read as follows:

**“907.3.1.11 Group M.** A fire alarm system shall be installed in existing Group M occupancies in accordance with Section 907.2.7.”

146. Subsection 907.3, “Where Required—Retroactive in Existing Buildings and Structures,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Paragraph 907.3.3, “Alarm Notification,” to read as follows:

**“907.3.3 Alarm notification.** 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.”

147. Subsection 907.4, “Manual Fire Alarm Boxes,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“907.4 Manual fire alarm boxes.** Manual fire alarm boxes shall be installed in accordance with Sections 907.4.1 through 907.4.5. Manual alarm actuating devices shall be an approved double action type.

**907.4.1 Location.** Manual fire alarm boxes shall be located not more than 5 feet (1524 mm) from the entrance to each exit. Additional manual fire alarm boxes shall be located so that travel distance to the nearest box does not exceed 200 feet (60 960 mm).

**907.4.2 Height.** The height of the manual fire alarm boxes shall be a minimum of 42 inches (1067 mm) and a maximum of 48 inches (1372 mm) measured vertically, from the floor level to the activating handle or lever of the box.

**907.4.3 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.

**907.4.4 Signs.** Where existing 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.

**907.4.5 Protective covers.** The fire code official is authorized to require the installation of listed manual fire alarm box protection covers to prevent malicious false alarms or 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.”

148. Subsection 907.6, “Wiring,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Paragraph 907.6.1, “Installation,” to read as follows:

**“907.6.1 Installation.** All fire alarm systems shall be installed in such a manner that the failure of any single alarm initiating device will not interfere with the normal operation of any other such device. All fire alarm systems shall be wired as follows: IDC – Class A style – D, SLC – Class A style 6, Notification – Class B style Y. Provide a minimum 6-foot (1829 mm) separation between supply and return loops in all Class A wired circuits.”

149. Paragraph 907.10.1, “Visible Alarms,” of Subsection 907.10, “Alarm Notification Appliances,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“907.10.1 Visible alarms.** Visible alarm notification appliances shall be provided in accordance with Sections 907.10.1.1 through 907.10.1.4. Visual alarm notification appliances shall be provided where an existing fire alarm system is upgraded, altered or a new fire alarm system is installed.

**Exceptions:**

1. Visible alarm notification appliances are not required in storage areas of Group S occupancies ~~[alterations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed]~~.
2. Visible alarm notification appliances shall not be required in exits as defined in Section 1002.1.”

150. Subsection 907.15, “Monitoring,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“907.15 Monitoring.** Fire alarm systems required by this chapter, other chapters of this code, or by the Dallas [International] Building Code[;] shall be monitored by an approved central station, remote supervising station or proprietary supervising station as defined in [aeeordance with] NFPA 72, or a local alarm which gives audible and visual signals at a constantly attended location.

**Exception:** Supervisory service is not required for:

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

151. Subsection 907.17, “Acceptance Tests,” of Section 907, “Fire Alarm and Detection Systems,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“907.17 Acceptance tests.** Upon completion of the installation of the fire alarm system, alarm notification appliances and circuits, alarm-initiating devices and circuits, supervisory-signal initiating devices and circuits, signaling line circuits, and primary and secondary power supplies shall be tested and approved in accordance with NFPA 72 and Section 901.5.”

152. Subsection 910.2, “Where Required,” of Section 910, “Smoke and Heat Vents,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“910.2 Where required.** Smoke and heat vents shall be installed in the roofs of one-story buildings or portions thereof occupied for the uses set forth in Sections 910.2.1 through 910.2.3.

**Exception:** Smoke and heat vents shall not be required in buildings protected throughout by an approved automatic sprinkler system. Any smoke and heat vents installed as a substitute for a requirement, a reduction of a requirement, or an increase in the limits of other requirements of the *Dallas Building Code*, are considered a required system.”

153. Subsection 912.2, “Location,” of Section 912, “Fire Department Connections,” of Chapter 9, “Fire Protection Systems,” of the 2006 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. ~~[The location of]~~ A fire department hose connection[s] shall be located within 400 feet (122 m) of a fire hydrant ~~[approved]~~.

**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 code official]~~.

**912.2.2 Existing buildings.** On existing buildings, wherever the fire department connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an approved sign mounted on the street front or on the side of the building. Such sign shall have the letters ‘FDC’ at least 6 inches (152 mm) high and words in letters at least 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.”

154. Section 912, “Fire Department Connections,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Subsection 912.7, “Fire Department Hose Connections,” to read as follows:

**“912.7 Fire department hose connections.** Fire department hose connections, as specified by NFPA 14, shall consist of approved two-way or four-way inlet Siamese connections, based on the calculated fire-flow requirements of the system served using hydraulic calculations or 250 gallons per minute (15.77 L/S) per inlet. All connections shall have hose threads compatible with those specified in Section 912.8.”

155. Section 912, “Fire Department Connections,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended by adding a new Subsection 912.8, “Hose Threads,” to read as follows:

**“912.8 Hose threads.** Fire hose threads used in conjunction with fire-extinguishing systems shall be as follows:

1. 2½-inch (64 mm) outlets shall have 7½ national standard fire hose coupling screw threads per inch.
2. Class II or III standpipe systems shall have 1-inch (25 mm) outlets with 11½ American standard taper pipe threads per inch.”

156. Subsection 913.4, “Valve Supervision,” of Section 913, “Fire Pumps,” of Chapter 9, “Fire Protection Systems,” of the 2006 International Fire Code is amended to read as follows:

**“913.4 Valve supervision.** Where provided, the fire pump suction, discharge and bypass valves, and the isolation valves on the backflow prevention device or assembly shall be supervised open by one of the following methods.

1. Central-station, proprietary, or remote-station signaling service.

2. Local signaling service that will cause the sounding of an audible signal at a constantly attended location.

~~[3. Locking valves open.~~

4. ~~Sealing of valves and approved weekly recorded inspection where valves are located within fenced enclosures under the control of the owner.]”~~

157. Section 913, “Fire Pumps,” of Chapter 9, “Fire Protection Systems,” of the 2006 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.”

158. Subsection 1004.3, “Posting of Occupant Load,” of Section 1004, “Occupant Load,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is amended to read as follows:

**“1004.3 Posting of occupant load.** Every room or space that is an assembly occupancy shall have the occupant load of the room or space posted in a conspicuous place, near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or authorized agent. At all times the owner or authorized agent shall keep a count of the number of occupants.”

159. Subsection 1008.1, “Doors,” of Section 1008, “Doors, Gates and Turnstiles,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is amended to read as follows:

**“1008.1 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 1017.2. Doors provided for egress purposes in numbers greater than required by this code shall meet the requirements of this section.

Security devices affecting means of egress shall be subject to approval by the fire code official. See Section 1028.2

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.”

160. Subparagraph 1008.1.3.4, “Access-Controlled Egress Doors,” of Paragraph 1008.1.3, “Special Doors,” of Subsection 1008.1, “Doors,” of Section 1008, “Doors, Gates and Turnstiles,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is deleted and replaced with a new Subparagraph 1008.1.3.4, “Access-Controlled Egress Doors/Electronic Locking Devices,” to read as follows:

**“1008.1.3.4 Access-controlled egress doors/electronic locking devices.** Doors in all occupancies are permitted to be equipped with approved, listed, electronic locks which shall be installed in accordance with this section if the building is protected throughout 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.

**Exception:** Electronic strikes or electronic mortise locks that do not impede egress are not subject to these requirements.

**1008.1.3.4.1 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 1008.1.3.4.4.
2. Locations where national security interest are present with approval of the building official.

(Note: For interior locations such as elevator lobbies, access includes passage into and through the tenant space being secured to provide access to the stairway. If access through the secured area is not desired, another exiting method such as providing a public corridor to the stairway should be utilized.)

**1008.1.3.4.2 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 in this section. General guidelines for such installation are:

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 1008.1.3.4.4.
3. For emergency situations, buildings shall be provided with an automatic release mechanism as specified in Section 1008.1.3.4.5.
4. Once released, the door shall swing freely as a push/pull door. For specific provisions and exceptions, see Section 1008.1.3.4.6.
5. Request to exit buttons, break glass boxes and emergency pull boxes, with their required signs, shall be installed in accordance with Sections 1008.1.3.4.4 and 1008.1.3.4.7.
6. All devices used in a fire rated/fire door situation shall be approved for such use.
7. A permit from the building official is required to install these devices, and these devices shall be functionally tested and approved by the fire code official.

**1008.1.3.4.3 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 1008.1.8.6 will not require separate permits. Electronic security devices shall be approved by the building official and shall be functionally tested by the fire code official.

**1008.1.3.4.4 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 1008.1.3.4.7. 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 1008.1.3.4.7 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 shall 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 shall still be installed at the controlled exits.
3. Secured systems where employee ingress/egress is monitored at all secured doors. A manual override system shall still be installed at each door.
4. Occupancies like jewelry stores where the desire is to buzz entry and exit. Buzzing entry is acceptable. Buzzing exit may be used but a manual override system shall still be installed at the door.)

When passage of individuals is undesired, unless other approved exits are available, access at the option of the individual shall be provided. Acceptable release methods may include options as follows:

1. An emergency pull box or a break glass emergency box may be located adjacent to the door to activate the release in an emergency. Choice of box shall be approved by the fire chief so as not to be confused with any other alarm boxes. An approved sign shall be adjacent to the box with the appropriate message such as 'Pull to Open Door' or 'Break Glass to Open Door.'

2. When approved by the building official, a release button will not be required for buildings provided with an approved automatic sprinkler system throughout with monitored 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.

**1008.1.3.4.5 Automatic release mechanisms.** Electronic locking devices shall automatically release upon:

1. Activation of the smoke detection or fire alarm system, if provided. The control devices shall remain unlocked until the system has been reset.
2. Activation of a water flow alarm or trouble signal when the area of concern has a sprinkler system. The control devices shall remain unlocked until the system is reset.
3. 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. Activation of a manual release mechanism as specified in Section 1008.1.3.4.4 and as further specified in Section 1008.1.3.4.7.

**1008.1.3.4.5.1 Zone control.** Deactivation of electronic control devices may be zone controlled as follows:

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

(Note: When security is still desired after the automatic release of the system, or when positive latching is necessary for fire door

installation, it is still possible to maintain security provided the appropriate combination of devices is installed. As an example, use of panic hardware or doorknobs that provide mechanical exiting at all times, but do not function from the exterior unless electronically activated, will still provide a secured door. It will provide the required manual exiting but entry by card or code is not available until the system resets.

No such provision 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 ensure security.)

**1008.1.3.4.6 Door swing freely/single exit motion.** Doors shall swing freely when the device is released.

(Note: It is required that the exit motion require only one activity. With normal doors one activity is pushing the mechanical panic bar or turning the mechanical doorknob. With an electronic device, one motion is pushing the button; therefore, pushing the button and pushing a panic bar or turning a doorknob would be two activities. An acceptable alternative is to use a motion detector (push button is still required). The motion detector will release the device upon approach and turning the doorknob is now just one activity. The push button is only necessary should the motion device fail. Another option is to use an electronic panic bar. One motion, pushing the bar, is for exiting but entry is controlled. Or, use of an electronic doorknob where exiting is always mechanical but the entry side does not engage without electronic activation.)

**Exception:** When doors are required to have positive latching, the building official and fire chief shall determine:

1. If a double motion to exit, i.e. the release of the electronic device then the operation of a door knob or push bar, is an acceptable exit means;
2. If the latch should be designed to fail in the secure position; or
3. Whether to deny the usage of the locks.

**1008.1.3.4.7 Request to exit buttons/break glass boxes/emergency pull boxes.** Exit buttons, break glass boxes and emergency pull boxes shall be installed as follows:

1. **Button:** The release button shall be red in color and at least a 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  $\frac{1}{8}$  inch (3.2 mm).
4. **Activation:** When operated, the manual unlocking device shall result in direct interruption of power to the device, independent of the access control system electronics, and the device shall remain unlocked for a minimum of 30 seconds. It shall not be required that the release mechanism be constantly held, such as holding down the button, to get out.

(Note: When buzzing someone out, holding down the button is acceptable; however, the manual release device installed at the door, even those required in the occupancy using buzzing, shall not require constant holding down to exit.)

5. **Time delay:** Exit devices in accordance with this section shall not possess a time delay option."

161. Subparagraph 1008.1.8.7, "Stairway Doors," of Paragraph 1008.1.8, "Door Operations," of Subsection 1008.1, "Doors," of Section 1008, "Doors, Gates and Turnstiles," of Chapter 10, "Means of Egress," of the 2006 International Fire Code is amended to read as follows:

**"1008.1.8.7 Stairway doors.** Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.

**Exceptions:**

1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.

2. This section shall not apply to doors arranged in accordance with Section 403.12 of the Dallas Building Code or approved access-controlled doors of Section 1008.1.3.2 of the Dallas [International] Building Code.
3. In stairways serving 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.”

162. Subsection 1009.7, “Curved Stairways,” of Section 1009, “Stairways,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is amended to read as follows:

**“1009.7 Curved stairways.** Curved stairways with winder treads shall have treads and risers in accordance with Section 1009.3 and the smallest radius shall not be less than twice the required width of the stairway.

**Exceptions:**

1. The radius restriction shall not apply to curved stairways for occupancies in Group R-3, and within individual dwelling units in occupancies in Group R-2.
2. Private circular stairways may be used as convenience stairways, provided the minimum width of run is not less than 10 inches (254 mm) measured 6 inches (152 mm) from the interior radius and the maximum width of run is not more than 18 inches (457 mm) measured 6 inches (152 mm) from the exterior radius. The width of the stairway shall not be less than 44 inches (1712 mm) with the interior radius not less than 44 inches (1712 mm). In all cases, the stairway shall comply with the structural provisions and Chapter 6 of the Dallas Building Code.”

163. Subsection 1010.1, “Scope,” of Section 1010, “Ramps,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is amended to read as follows:

**“1010.1 Scope.** The provisions of this section shall apply to ramps used as a component of a means of egress.

**Exceptions:**

1. Other than ramps that are part of the accessible routes providing access in accordance with Sections 1108.2 through 1108.2.3 and 1108.2.5 of the Dallas [International] Building Code, ramped aisles within assembly rooms or spaces shall conform with the provisions in Section 1025.11.
2. Curb ramps shall comply with ICC A117.1 or with Section 1101.2 of the Dallas Building Code.
3. Vehicle ramps in parking garages for pedestrian exit access shall not be required to comply with Sections 1010.3 through 1010.9 when they are not an accessible route serving accessible parking spaces, other required accessible elements or part of an accessible means of egress.”

164. Subsection 1014.2, “Egress Through Intervening Spaces,” of Section 1014, “Exit Access,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is amended to read as follows:

**“1014.2 Egress through intervening spaces.** Egress through intervening spaces shall comply with this section.

1. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas are accessory to the area served; are not a high-hazard 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 when the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.

2. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.

**Exceptions:**

1. Means of egress are not prohibited through a kitchen area serving adjoining rooms constituting part of the same dwelling unit or sleeping unit.
2. Means of egress are not prohibited through stockrooms in Group M occupancies when all of the following are met:

- 2.1 The stock is of the same hazard classification as that found in the main retail area;
  - 2.2 Not more than 50 percent of the exit access is through the stockroom;
  - 2.3 The stockroom is not subject to locking from the egress side; and
  - 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. 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. In a building protected throughout by an approved automatic sprinkler system one exit may pass through a kitchen or storeroom provided:
    - 5.1. The exit door shall be visible upon entering the kitchen or storeroom and shall be clearly marked and identifiable as an exit; and
    - 5.2. The required exit width through the kitchen or storeroom shall be permanently marked and maintained clear and unobstructed.”

165. Subsection 1014.3, “Common Path of Egress Travel,” of Section 1014, “Exit Access,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is amended to read as follows:

**“1014.3 Common path of egress travel.** In occupancies other than Groups H-1, H-2 and H-3, the common path of egress travel shall not exceed 75 feet (22 860 mm). In Group H-1, H-2, and H-3 occupancies, the common path of egress travel shall not exceed 25 feet (7620 mm). For common path of egress travel in Group A occupancies having fixed seating, see Section 1025.8.

**Exceptions:**

1. The length of a common path of egress travel in Group B, F and S

occupancies shall not be more than 100 feet (30 480 mm), provided that the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

2. Where a tenant space in Group B, S and U occupancies has an occupant load of not more than 30, the length of a common path of egress travel shall not be more than 100 feet (30 480 mm).
3. The length of a common path of egress travel in a Group I-3 occupancy shall not be more than 100 feet (30 480 mm).
4. The length of a common path of egress travel in a Group R-2 occupancy shall not be more than 125 feet (38 100 mm), provided that the building is protected throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

5. Buildings of Group R-3 occupancy.”

166. Subsection 1015.2, “Exit or Exit Access Doorway Arrangement,” of Section 1015, “Exit and Exit Access Doorways,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is amended to read as follows:

**“1015.2 Exit or exit access doorway arrangement.** Required exits shall be located in a manner that makes their availability obvious. Exits shall be unobstructed at all times. Exit and exit access doorways shall be arranged in accordance with Sections 1015.2.1 and 1015.2.2.

**1015.2.1 Two exits or exit access doorways.** Where two exits or exit access doorways are required from any portion of the exit access, the exit doors or exit access doorways 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 exit doors or exit access doorways. ~~[Interlocking or scissor stairs shall be counted as one exit stairway.]~~

**Exceptions:**

1. Where exit enclosures are provided as a portion of the required exit and are interconnected by a 1-hour fire-resistance-rated corridor conforming to the requirements of Section 1017, 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 of the exit doors or exit access doorways shall not be less than

one-fourth [~~third~~] of the length of the maximum overall diagonal dimension of the area served.

**1015.2.1.1 Scissor stairs.** Scissor stairs shall be counted as one exit stairway.

**Exception:** Scissor stairs are permitted to be counted as two exits if all of the following conditions are met:

1. The distance between exit doors complies with Section 1015.2.
2. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
3. 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 those for standpipes and automatic sprinkler systems. The separation between the stairways is permitted to be constructed as a single wall.
4. Each exit meets all of the requirements in Section 1020, except as otherwise noted in the exception.

**1015.2.2 Three or more exits or exit access doorways.** Where access to three or more exits is required, at least two exit doors or exit access doorways shall be arranged in accordance with the provisions of Section 1015.2.1.

167. Table 1016.1, “Exit Access Travel Distance,” of Subsection 1016.1, “Travel Distance Limitations,” of Section 1016, “Exit Access Travel Distance,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is amended to read as follows:

**“Table 1016.1  
EXIT ACCESS TRAVEL DISTANCE<sup>a</sup>**

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

For SI: 1 foot = 304.8 mm.

- a. See the following sections for modifications to exit access travel distance requirements:  
 Section 402 of the Dallas ~~[International]~~ *Building Code*: For the distance limitation in malls.  
 Section 404 of the Dallas ~~[International]~~ *Building Code*: For the distance limitation through an atrium space.  
 Section 1016.2: For increased limitation in Groups F-1 and S-1.  
 Section 1025.7: For increased limitation in assembly seating.  
 Section 1025.7: For increased limitation for assembly open-air seating.  
 Section 1019.2: For buildings with one exit.  
 Chapter 31 of the Dallas ~~[International]~~ *Building Code*: For the limitation in temporary structures.
- 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 in accordance to Section 903.3.1.2 are permitted.”

168. Subsection 1017.1, “Construction,” of Section 1017, “Corridors,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is amended to read as follows:

**“1017.1 Construction.** Corridors shall be fire-resistance rated in accordance with Table 1017.1. The corridor walls required to be fire-resistance rated shall comply with Section 708 of the Dallas ~~[International]~~ *Building Code* for fire partitions.

**Exceptions:**

1. A fire-resistance rating is not required for corridors in an occupancy in Group E where each room that is used for instruction has at least one door directly to the exterior and rooms for assembly purposes have at least 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 Group 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 which is a space requiring only a single means of egress complying with Section 1015.1.
5. Corridor walls and ceilings need not be of fire-resistive construction within the applicable single tenant space as listed in Table 1017.1(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."

169. Table 1017.1, "Corridor Fire-Resistance Rating," of Subsection 1017.1, "Construction," of Section 1017, "Corridors," of Chapter 10, "Means of Egress," of the 2006 International Fire Code is amended to read as follows:

**"TABLE 1017.1  
CORRIDOR FIRE-RESISTANCE RATING**

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)	
		Without sprinkler system	With sprinkler system <sup>c</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	1	0.5
I-2 <sup>a</sup> , I-4	All	Not Permitted	0
I-1, I-3	All	Not Permitted	1 <sup>b</sup>

- a. For requirements for occupancies in Group I-2, see Section 407.3 of the *Dallas* ~~[International]~~ *Building Code*.
- b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.7 of the *Dallas* ~~[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, Division 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 716 in the *Dallas Building Code* for requirements on fire and smoke dampers."

170. Subsection 1017.3, “Dead Ends,” of Section 1017, “Corridors,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is amended to read as follows:

**“1017.3 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 (see Section 202), the dead end in a corridor shall not exceed 50 feet (15 240 mm).
2. In occupancies of ~~[in]~~ Groups B, M, S and F 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).
5. In Group R, Division 1, 2 and 4 occupancy buildings equipped throughout with an approved automatic sprinkler system, the maximum dead-end distance shall not exceed 35 feet (10 668 mm).”

171. Paragraph 1020.1.7, “Smokeproof Enclosures,” of Subsection 1020.1, “Enclosures Required,” of Section 1020, “Vertical Exit Enclosures,” of Chapter 10, “Means of Egress,” of the 2006 International Fire Code is amended to read as follows:

**“1020.1.7 Smokeproof enclosures.** In buildings required to comply with Section 403 or 405 of the Dallas ~~[International]~~ *Building Code*, each of the exits of a building that serves stories where any ~~[the]~~ floor surface is located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access or more than 30 feet (9144 mm) below the level of exit discharge serving such floor levels shall be a smokeproof enclosure or pressurized stairway in accordance with Section 909.20. In any building that includes a scissor stair as described in the exception of Section 1015.2.1.1, both exit stairs of the dual enclosure structure shall be a smokeproof enclosure or pressurized stairway in accordance with Section 909.20 of the Dallas

Building Code.

**Exception:** Smokeproof enclosures shall not be required in buildings protected throughout by an approved automatic sprinkler system. This exception does not apply to a building in which scissor stairs are used as two exits in accordance with Section 1015.2.1.1 of the *Dallas Building Code*. Any smokeproof enclosure installed as a substitute for a requirement, a reduction of a requirement, or an increase in the limits of other requirements of the *Dallas Building Code*, is considered a required system.”

172. Paragraph 1106.4.4, “Operators,” of Subsection 1106.4, “Operation, Maintenance and Use of Aircraft-Fueling Vehicles,” of Section 1106, “Aircraft Fueling,” of Chapter 11, “Aviation Facilities,” of the 2006 International Fire Code is amended to read as follows:

**“1106.4.4 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.”

173. Subparagraph 1106.5.2.3, “Funnels,” of Paragraph 1106.5.2, “Electrical Bonding,” of Subsection 1106.5, “Fueling and Defueling,” of Section 1106, “Aircraft Fueling,” of Chapter 11, “Aviation Facilities,” of the 2006 International Fire Code is amended to read as follows:

**“1106.5.2.3 Funnels.** Where required, metal funnels are allowed to be used during fueling operations. Direct contact between the fueling receptacle, the funnel and the fueling nozzle shall be maintained during the fueling operation. Only metal funnels shall be used.”

174. Paragraph 1106.5.3, “Training,” of Subsection 1106.5, “Fueling and Defueling,” of Section 1106, “Aircraft Fueling,” of Chapter 11, “Aviation Facilities,” of the 2006 International Fire Code is amended to read as follows:

**“1106.5.3 Training.** Aircraft-fueling vehicles shall be attended and operated only by persons instructed in methods of proper use and operation and who are qualified to use such fueling vehicles in accordance with minimum safety requirements.

Qualified operators shall carry on their person an identification card issued by their employer certifying their qualifications.”

175. Subsection 1106.8, “Loading and Unloading,” of Section 1106, “Aircraft Fueling,” of Chapter 11, “Aviation Facilities,” of the 2006 International Fire Code is amended to read as follows:

**“1106.8 Loading and unloading.** Aircraft-fueling vehicles shall be loaded only at an approved loading rack. Such loading racks shall be in accordance with Section 3406.5.1.12.

**Exceptions:**

1. Aircraft-refueling units may be loaded from the fuel tanks of an aircraft during defueling operations.
2. Fuel transfer between tank vehicles is allowed to be performed in accordance with Section 3406.6 when the operation is at least 200 feet (60 960 mm) from an aircraft and at least 50 feet (15 240 mm) from any structure.

The fuel cargo of such units shall be unloaded only by approved transfer apparatus into the fuel tanks of aircraft~~;~~ or underground storage tanks ~~[or approved gravity storage tanks].”~~

176. Paragraph 1106.11.3, “Drum Fueling,” of Subsection 1106.11, “Fuel Spill Prevention and Procedures,” of Section 1106, “Aircraft Fueling,” of Chapter 11, “Aviation Facilities,” of the 2006 International Fire Code is deleted.

177. Subsection 1107.4, “Exits,” of Section 1107, “Helistops and Heliports,” of Chapter 11, “Aviation Facilities,” of the 2006 International Fire Code is amended to read as follows:

**“1107.4 Exits.** Exits and stairways shall be maintained in accordance with Section 412.5 of the Dallas [International] Building Code. Means of egress and stairways from heliports and helistops shall be maintained in accordance with Chapter 10. Landing areas located on buildings or structures shall have two or more means of egress. For landing platforms or roof areas less than 60 feet (18 288 mm) in length or less than 2,000 square feet (186 m<sup>2</sup>) in area, the second means of egress is allowed to be a fire escape or ladder leading to the floor below.”

178. Subsection 1207.3, “Solvent Storage Tanks,” of Section 1207, “Dry Cleaning Systems,” of Chapter 12, “Dry Cleaning,” of the 2006 International Fire Code is amended to read as follows:

**“1207.3 Solvent storage tanks.** Solvent storage tanks for Class II, IIIA and IIIB liquids shall conform to the requirements of Chapter 34 ~~[and be located underground or outside, above ground.~~

~~**Exception:** As provided in NFPA 32 for indoor storage or treatment tanks].”~~

179. Subsection 1404.4, “Spontaneous Ignition,” of Section 1404, “Precautions Against Fire,” of Chapter 14, “Fire Safety During Construction and Demolition,” of the 2006 International Fire Code is amended to read as follows:

**“1404.4 Spontaneous ignition.** Materials susceptible to spontaneous ignition, such as ~~[oily]~~ containing flammable or combustible liquids and similar materials, shall be stored in a listed disposal container.”

180. Subsection 1408.5, “Hot Work Operations,” of Section 1408, “Owner’s Responsibility for Fire Protection,” of Chapter 14, “Fire Safety During Construction and Demolition,” of the 2006 International Fire Code is amended to read as follows:

**“1408.5 Hot work operations.** The fire prevention program superintendent shall be responsible for supervising the ~~[permit system for]~~ hot work operations in accordance with Chapter 26.”

181. Subsection 1410.1, “Required Access,” of Section 1410, “Access for Fire Fighting,” of Chapter 14, “Fire Safety During Construction and Demolition,” of the 2006 International Fire Code is amended to read as follows:

**“1410.1 Required access.** Approved vehicle access for fire fighting shall be provided to all construction or demolition sites as required in Chapter 5. Vehicle access shall be provided to within 100 feet (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. 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.”

182. Subsection 1411.1, “Stairways Required,” of Section 1411, “Means of Egress,” of Chapter 14, “Fire Safety During Construction and Demolition,” of the 2006 International Fire Code is amended to read as follows:

**“1411.1 Stairways required.** Where a building has been constructed to a height greater than 35 [50] feet (10 668 [~~15–240~~] mm) or three [~~four~~] stories, or where an existing building exceeding 35 [50] feet (10 668 [~~15–240~~] mm) in height is altered, at least one temporary lighted stairway shall be provided unless one or more of the permanent stairways are erected as the construction progresses.”

183. Subsection 1413.1, “Where Required,” of Section 1413, “Standpipes,” of Chapter 14, “Fire Safety During Construction and Demolition,” of the 2006 International Fire Code is amended to read as follows:

**“1413.1 Where required.** Buildings four or more stories in height shall be provided with not less than one standpipe 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 access. Such standpipe shall be provided with fire department hose connections at accessible locations adjacent to usable stairs. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring.”

184. Paragraph 1503.2.7, “Welding Warning Signs,” of Subsection 1503.2, “Sources of Ignition,” of Section 1503, “Protection of Operations,” of Chapter 15, “Flammable Finishes,” of the 2006 International Fire Code is amended to read as follows:

**“1503.2.7 Welding warning signs.** Welding, cutting and similar spark-producing operations shall not be conducted in or adjacent to flammable vapor areas or dipping or coating operations unless precautions have been taken to provide safety. Where welding and cutting operations are conducted, c[€]onspicuous signs with the following warning shall be posted in the vicinity of flammable vapor areas, dipping operations and paint storage rooms:

NO WELDING  
THE USE OF WELDING OR CUTTING EQUIPMENT IN OR NEAR THIS  
AREA IS DANGEROUS BECAUSE OF FIRE AND EXPLOSION HAZARDS.  
WELDING AND CUTTING SHALL BE DONE ONLY UNDER THE  
SUPERVISION OF THE PERSON IN CHARGE.”

185. Subsection 1504.2, “Location of Spray-Finishing Operations,” of Section 1504, “Spray Finishing,” of Chapter 15, “Flammable Finishes,” of the 2006 International Fire Code is amended by adding a new Paragraph 1504.2.1, “Prohibited Locations,” to read as follows:

**“1504.2.1 Prohibited locations.** Outside spraying or spray-finishing operations in basements or subbasements are prohibited except when approved by the fire chief.”

186. Subsection 1504.4, “Fire Protection,” of Section 1504, “Spray Finishing,” of Chapter 15, “Flammable Finishes,” of the 2006 International Fire Code is amended to read as follows:

**“1504.4 Fire protection.** New and existing s[S]ray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system complying with Chapter 9. Protection shall also extend to exhaust ducts and both sides of dry filters when such filters are used.”

187. Subsection 1510.4, “Ignition Sources,” of Section 1510, “Floor Surfacing and Finishing Operations,” of Chapter 15, “Flammable Finishes,” of the 2006 International Fire Code is amended to read as follows:

**“1510.4 Ignition sources.** The power shall be shut down to all electrical sources of ignition within the flammable vapor area, unless those devices are classified for use in Class I, Division 1 hazardous locations. Open-flame devices and electrical equipment not classified for Class I locations, as defined in the *Dallas Electrical Code*, shall not be operated during or within four hours of the application of flammable or combustible liquids.”

188. Section 1604, “Sources of Ignition,” of Chapter 16, “Fruit and Crop Ripening,” of the 2006 International Fire Code is amended by adding a new Subsection 1604.6, “Smoking,” to read as follows:

**“1604.6 Smoking.** NO SMOKING signs shall be posted at every entrance, and smoking shall be prohibited in ripening rooms. See Section 310.”

189. Subparagraph 1803.10.1.2, “Combustible Tools,” of Paragraph 1803.10.1, “Workstations and Tools,” of Subsection 1803.10, “Automatic Sprinkler System,” of Section 1803, “General Safety Provisions,” of Chapter 18, “Semiconductor Fabrication Facilities,” of the 2006 International Fire Code is amended to read as follows:

**“1803.10.1.2 Combustible tools.** Where the horizontal surface of a combustible tool is obstructed from ceiling sprinkler discharge, automatic sprinkler protection that covers the horizontal surface of the tool shall be provided.

**Exceptions:**

1. An automatic electrically supervised, gaseous fire-extinguishing local surface application system shall be allowed as an alternative to sprinklers. Gaseous-extinguishing systems shall be actuated by infrared (IR) or ultraviolet/infrared (UVIR) optical detectors.
2. Tools constructed of materials that are listed or approved for use without internal fire extinguishing system protection.”

190. Paragraph 1803.12.3, “Alarm Signals,” of Subsection 1803.12, “Emergency Alarm System,” of Section 1803, “General Safety Provisions,” of Chapter 18, “Semiconductor Fabrication Facilities,” of the 2006 International Fire Code is amended to read as follows:

**“1803.12.3 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.”

191. Paragraph 1803.15.1, “Required Electrical Systems,” of Subsection 1803.15, “Emergency Power System,” of Section 1803, “General Safety Provisions,” of Chapter 18, “Semiconductor Fabrication Facilities,” of the 2006 International Fire Code is amended to read as follows:

**“1803.15.1 Required electrical systems.** Emergency power shall be provided for

electrically operated equipment and connected control circuits for the following systems:

1. HPM exhaust ventilation systems.
2. HPM gas cabinet ventilation systems.
3. HPM exhausted enclosure ventilation systems.
4. HPM gas room ventilation systems.
5. HPM gas detection systems.
6. Emergency alarm systems.
7. Manual fire alarm systems.
8. Automatic extinguishing [~~sprinkler~~] system monitoring and alarm systems.
9. Automatic alarm and detection systems for pyrophoric liquids and Class 3 water-reactive liquids required in Section 1805.2.3.5.
10. Flow alarm switches for pyrophoric liquids and Class 3 water-reactive liquids cabinet exhaust ventilation systems required in Section 1805.2.3.5.
11. Electrically operated systems required elsewhere in this code or in the Dallas [~~International~~] *Building Code* applicable to the use, storage or handling of HPM.”

192. Subsection 2201.1, “Scope,” of Section 2201, “General,” of Chapter 22, “Motor Fuel-Dispensing Facilities and Repair Garages,” of the 2006 International Fire Code is amended to read as follows:

**“2201.1 Scope.** Automotive motor fuel-dispensing facilities, aircraft motor fuel-dispensing facilities, marine motor fuel-dispensing facilities, fleet vehicle motor fuel-dispensing facilities and repair garages shall be in accordance with this chapter and the Dallas [~~International~~] *Building Code*, Dallas [~~International~~] *Fuel Gas Code* and the Dallas [~~International~~] *Mechanical Code*. Such operations shall include both operations that are accessible to the public and private operations. Flammable and combustible liquids, liquefied petroleum gas, compressed natural gas and hydrogen shall also be in accordance with Chapters 30, 34 and 38..”

193. Subsection 2201.3, “Construction Documents,” of Section 2201, “General,” of Chapter 22, “Motor Fuel-Dispensing Facilities and Repair Garages,” of the 2006 International Fire Code is deleted.

194. Section 2201, “General,” of Chapter 22, “Motor Fuel-Dispensing Facilities and Repair Garages,” of the 2006 International Fire Code is amended by adding a new Subsection 2201.7, “Plans and Specifications,” to read as follows:

**“2201.7 Plans and specifications.** Plans and specifications shall be submitted for review and approval prior to the installation or construction of a motor vehicle fuel-dispensing station. A site plan shall be submitted which illustrates the location of flammable liquid, LP-gas, compressed natural gas (CNG), or hydrogen storage vessels, 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 above-ground liquid storage tanks; the location and design of the fuel dispensers and dispenser nozzles; the design and specifications for related piping, valves and fittings; the location and classification of electrical equipment, including emergency fuel shutdown devices; and specifications for fuel storage and venting components.
2. **Liquefied petroleum gas:** equipment and components as required in NFPA 58; the location and design of the LP-gas dispensers and dispenser nozzles; the design, specifications and location for related piping, valves and fittings; the location and classification of electrical equipment, including emergency fuel shutdown devices; and specifications for fuel storage and pressure-relief components.
3. **Compressed natural gas:** when provided, the location of CNG compressors; the location and design of CNG dispensers and vehicle fueling connections; the design, specification and location for related piping, valves and fittings; the location and classification of electrical equipment, including emergency fuel shutdown devices; and specification for fuel storage and pressure-relief components.
4. **Hydrogen:** when provided, the location of equipment used for generation of hydrogen; the location of hydrogen compressors; the location and design of hydrogen dispensers and vehicle fueling connections; the design, specification and location for related piping, valves and fittings; the location and classification

of electrical equipment, including emergency fuel shutdown devices; and specification for fuel storage and pressure-relief components.”

195. Subsection 2202.1, “Definitions,” of Section 2202, “Definitions,” of Chapter 22, “Motor Fuel-Dispensing Facilities and Repair Garages,” of the 2006 International Fire Code is amended by adding the following definition in alphabetical order:

**“AIRCRAFT MOTOR FUEL-DISPENSING FACILITY.** That portion of an airport or heliport where flammable or combustible liquids used as aircraft fuel are stored and dispensed from fixed automotive-type dispensing equipment into fuel tanks of an aircraft and shall include all facilities essential thereto.”

196. Paragraph 2208.3.1, “Location on Property,” of Subsection 2208.3, “Location of Dispensing Operations and Equipment,” of Section 2208, “Compressed Natural Gas Motor Fuel-Dispensing Facilities,” of Chapter 22, “Motor Fuel-Dispensing Facilities and Repair Garages,” of the 2006 International Fire Code is amended to read as follows:

**“2208.3.1 Location on property.** In addition to the requirements of Section 2203.1, compression, storage and dispensing equipment not located in vaults complying with Chapter 30 shall be installed as follows:

1. Not beneath power lines.
2. Ten feet (3048 mm) or more from the nearest building or lot line which could be built on, public street, sidewalk, or source of ignition.

**Exception:** Dispensing equipment need not be separated from canopies that are constructed in accordance with the *Dallas [International] Building Code* and that provide weather protection for the dispensing equipment.

3. Twenty-five feet (7620 mm) or more from the nearest rail of any railroad track and 50 feet (15 240 mm) or more from the nearest rail of any railroad main track or any railroad or transit line where power for train propulsion is provided by an outside electrical source such as third rail or overhead catenary.
4. Fifty feet (15 240 mm) or more from the vertical plane below the nearest

overhead wire of a trolley bus line.

5. Storage of CNG is prohibited in heavily populated or congested areas unless approved by the fire code official.

197. Subparagraph 2211.2.3.2, “Disposal of Oily Waste,” of Paragraph 2211.2.3, “Drainage and Disposal of Liquids and Oil-Soaked Waste,” of Subsection 2211.2, “Storage and Use of Flammable and Combustible Liquids,” of Section 2211, “Repair Garages,” of Chapter 22, “Motor Fuel-Dispensing Facilities and Repair Garages,” of the 2006 International Fire Code is deleted.

198. Subsection 2211.2, “Storage and Use of Flammable and Combustible Liquids,” of Section 2211, “Repair Garages,” of Chapter 22, “Motor Fuel-Dispensing Facilities and Repair Garages,” of the 2006 International Fire Code is amended by adding a new Paragraph 2211.2.5, “Spontaneous Ignition,” to read as follows:

**“2211.2.5 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.”

199. The definition of “High-Piled Combustible Storage,” in Subsection 2302.1, “Definitions,” of Section 2302, “Definitions,” of Chapter 23, “High-Piled Combustible Storage,” of the 2006 International Fire Code is amended to read as follows:

**“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.

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.”

200. Subsection 2306.7, “Smoke and Heat Removal,” of Section 2306, “General Fire Protection and Life Safety Features,” of Chapter 23, “High-Piled Combustible Storage,” of the 2006 International Fire Code is amended to read as follows:

**“2306.7 Smoke and heat removal.** Where smoke and heat removal are required by Table 2306.2, smoke and heat vents shall be provided in accordance with Section 910. Where draft curtains are required by Table 2306.2, they shall be provided in accordance with Section 910.3.4.

**Exception:** Not required in fully sprinklered buildings.”

201. Subsection 2307.2, “Fire Protection,” of Section 2307, “Solid-Piled and Shelf Storage,” of Chapter 23, “High-Piled Combustible Storage,” of the 2006 International Fire Code is amended to read as follows:

**“2307.2 Fire protection.** Where automatic sprinklers are required by Table 2306.2, an approved automatic sprinkler system shall be installed throughout the building or to 2 [4]-hour fire barrier walls constructed in accordance with the Dallas [~~International~~] *Building Code*. Openings in such walls shall be protected by opening protective assemblies 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 the Dallas [~~International~~] *Building Code* and NFPA 13.”

202. Subsection 2308.1, “General,” of Section 2308, “Rack Storage,” of Chapter 23, “High-Piled Combustible Storage,” of the 2006 International Fire Code is amended to read as follows:

**“2308.1 General.** Rack storage shall be in accordance with Section 2306, [~~and~~] this section and Section 3111 of the Dallas Building Code. Bin boxes exceeding 5 feet (1524 mm) in any dimension shall be regulated as rack storage.”

203. Subsection 2308.2, “Fire Protection,” of Section 2308, “Rack Storage,” of Chapter 23, “High-Piled Combustible Storage,” of the 2006 International Fire Code is amended to read as follows:

**“2308.2 Fire protection.** Where automatic sprinklers are required by Table 2306.2, an approved automatic sprinkler system shall be installed throughout the building or to 2 [4]-hour fire barrier walls constructed in accordance with the Dallas [~~International~~]

*Building Code*. Openings in such walls shall be protected by opening protective assemblies 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, the Dallas [~~International~~] *Building Code*.”

204. Chapter 24, “Tents, Canopies and Other Membrane Structures,” of the 2006 International Fire Code is retitled as Chapter 24, “Tents, Canopies, Other Membrane Structures and Exhibition Halls.”

205. Subsection 2403.2, “Approval Required,” of Section 2403, “Temporary Tents, Canopies and Membrane Structures,” of Chapter 24, “Tents, Canopies, Other Membrane Structures and Exhibition Halls,” of the 2006 International Fire Code is amended to read as follows:

**“2403.2 Approval required.** Tents and membrane structures having an area in excess of 399 [200] square feet (37 [19] m<sup>2</sup>) and canopies in excess of 399 [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. Site plans shall be submitted 15 days prior to the event for review and approval by the fire code official.

**Exceptions:**

1. Tents used exclusively for recreational camping purposes.
2. Fabric canopies open on all sides which comply with all of the following:

Individual canopies having a maximum size of 700 square feet (65 m<sup>2</sup>).

The aggregate area of multiple canopies placed side by side without a fire break clearance of 12 feet (3658 mm) not exceeding 700 square feet (65 m<sup>2</sup>) total.

A minimum clearance of 12 feet (3658 mm) to all structures and other tents.

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

206. Paragraph 2403.8.2, “Location,” of Subsection 2403.8, “Access, Location and Parking,” of Section 2403, “Temporary Tents, Canopies and Membrane Structures,” of Chapter 24, “Tents, Canopies, Other Membrane Structures and Exhibition Halls,” of the 2006 International Fire Code is amended by adding a new Subparagraph 2403.8.2.1, “Parking,” to read as follows:

**“2403.8.2.1 Parking.** Parking shall be provided in accordance with the *Dallas Development Code*.”

207. Subsection 2404.2, “Flame Propagation Performance Treatment,” of Section 2404, “Temporary and Permanent Tents, Canopies and Membrane Structures,” of Chapter 24, “Tents, Canopies, Other Membrane Structures and Exhibition Halls,” of the 2006 International Fire Code is amended to read as follows:

**“2404.2 Flame propagation performance treatment.** Before a permit is granted, the owner or agent shall file with the fire chief [~~code official~~] a certificate executed by an approved testing laboratory, certifying that the tents; canopies and membrane structures and their appurtenances; sidewalls, drops and tarpaulins; floor coverings, bunting and combustible decorative materials and effects, including sawdust when used on floors or passageways, shall be composed of material meeting the flame propagation performance criteria of NFPA 701 or shall be treated with a flame retardant in an approved manner and meet the flame propagation performance criteria of NFPA 701, and that such flame propagation performance criteria are effective for the period specified by the permit.”

208. Subsection 2404.4, “Certification,” of Section 2404, “Temporary and Permanent Tents, Canopies and Membrane Structures,” of Chapter 24, “Tents, Canopies, Other Membrane Structures and Exhibition Halls,” of the 2006 International Fire Code is amended to read as follows:

**“2404.4 Certification.** An affidavit or affirmation shall be submitted to the fire chief [~~code official~~] and a copy retained on the premises on which the tent or air-supported structure is located. The affidavit shall attest to the following information relative to the flame propagation performance criteria of the fabric:

1. Names and address of the owners of the tent, canopy or air-supported structure.
2. Date the fabric was last treated with flame-retardant solution.

3. Trade name or kind of chemical used in treatment.
4. Name of person or firm treating the material.
5. Name of testing agency and test standard by which the fabric was tested.”

209. Subsection 2404.5, “Combustible Materials,” of Section 2404, “Temporary and Permanent Tents, Canopies and Membrane Structures,” of Chapter 24, “Tents, Canopies, Other Membrane Structures and Exhibition Halls,” of the 2006 International Fire Code is amended to read as follows:

**“2404.5 Combustible materials.** Hay, straw, shavings or similar combustible materials shall not be located within any tent, canopy 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. The areas within and adjacent to the tent or air-supported structure shall be maintained clear of all combustible materials or vegetation that could create a fire hazard within 20 feet (6096 mm) of the structure. Combustible trash shall be removed at least once a day from the structure during the period the structure is occupied by the public.

**Exception:** Hay, straw and similar combustible materials treated with a flame retardant in an approved manner or used for livestock bedding or feeding when approved by the fire chief.”

210. Subsection 2404.6, “Smoking,” of Section 2404, “Temporary and Permanent Tents, Canopies and Membrane Structures,” of Chapter 24, “Tents, Canopies, Other Membrane Structures and Exhibition Halls,” of the 2006 International Fire Code is amended to read as follows:

**“2404.6 Smoking.** Smoking shall not be permitted in tents, canopies, [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.”

211. Subsection 2404.7, “Open or Exposed Flame,” of Section 2404, “Temporary and Permanent Tents, Canopies and Membrane Structures,” of Chapter 24,

“Tents, Canopies, Other Membrane Structures and Exhibition Halls,” of the 2006 International Fire Code is amended to read as follows:

**“2404.7 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, canopy or membrane structures while open to the public unless approved by the fire chief ~~[code official]~~. When approved, cooking devices shall be located so there is a separation of 4 feet (1219 mm) between the flame and the tent or canopy material.”

212. Paragraph 2404.15.5, “Cooking Tents,” of Subsection 2404.15, “Heating and Cooking Equipment,” of Section 2404, “Temporary and Permanent Tents, Canopies and Membrane Structures,” of Chapter 24, “Tents, Canopies, Other Membrane Structures and Exhibition Halls,” of the 2006 International Fire Code is amended to read as follows:

**“2404.15.5 Cooking tents.** Tents where cooking is performed shall be separated from other tents, canopies or membrane structures by a minimum of 20 feet (6096 mm). Cooking equipment shall be located so there is a separation of 4 feet (1219 mm) between the flame and any combustible material including the tent or canopy material.”

213. Subsection 2404.16, “LP-Gas,” of Section 2404, “Temporary and Permanent Tents, Canopies and Membrane Structures,” of Chapter 24, “Tents, Canopies, Other Membrane Structures and Exhibition Halls,” of the 2006 International Fire Code is amended by adding a new Paragraph 2404.16.4, “Places of Exhibition,” to read as follows:

**“2404.16.4 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 38 of this code and, when applied inside Fair Park, satisfies the requirements of Section 32-19 of the *Dallas City Code*.

**2404.16.4.1 Capacity.** When used inside structures, LP-gas containers shall not

exceed a water capacity greater than 12 pounds (5 kg).”

214. Paragraph 2404.17.3, “Refueling,” of Subsection 2404.17, “Flammable and Combustible Liquids,” of Section 2404, “Temporary and Permanent Tents, Canopies and Membrane Structures,” of Chapter 24, “Tents, Canopies, Other Membrane Structures and Exhibition Halls,” of the 2006 International Fire Code is amended to read as follows:

**“2404.17.3 Refueling.** Refueling shall be performed in an approved location not less than 20 feet (6096 mm) from tents, canopies or membrane structures. Fuel tanks shall be of adequate capacity to permit uninterrupted operation during normal operating hours. Refueling in a place of assembly shall be conducted only when the equipment is not in use and shall be approved by the fire chief.”

215. Chapter 24, “Tents, Canopies, Other Membrane Structures and Exhibition Halls,” of the 2006 International Fire Code is amended by adding a new Section 2405, “Exhibition Halls,” to read as follows:

#### **“SECTION 2405 EXHIBITION HALLS**

**2405.1 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.

**2405.1.1 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.

**2405.1.2 Description and plans.** Two copies of accurately-scaled floor plans are required to be submitted to the fire chief 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.

**2405.1.3 Compliance with plans.** The exhibit shall be constructed, operated and maintained in accordance with this code and the approved plans.

**2405.2 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.

**2405.3 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.

**2405.4 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 38 and, when applied inside Fair Park, satisfies the requirements of Section 32-19 of the *Dallas City Code*.

When allowed, a single container shall not exceed a water capacity of 12 pounds (5 kg).

**2405.5 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 chief may permit limited use of the above prohibited materials under special circumstances.

**2405.6 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 chief.
2. Provide and maintain noncombustible ashtrays in areas where smoking is not prohibited by the fire chief.
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 chief.

**2405.7 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.

**2405.8 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.

**2405.9 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 chief.

**2405.10 Sawdust and shavings.** The operator of premises used as a place of exhibition shall keep sawdust and shavings flameproofed.

**2405.11 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 chief.

**2405.12 Flameproof materials.** The operator of a premises 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.

**2405.13 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.”

216. Subsection 2507.3, “Locking,” of Section 2507, “Fencing,” of Chapter 25, “Tire Rebuilding and Tire Storage,” of the 2006 International Fire Code is amended to read as follows:

**“2507.3 Locking.** All gates to the storage yard shall be locked when the storage yard is not staffed and shall be in accordance with Section 503.”

217. Section 2509, “Indoor Storage Arrangement,” of Chapter 25, “Tire Rebuilding and Tire Storage,” of the 2006 International Fire Code is amended to read as follows:

**“SECTION 2509  
INDOOR STORAGE ARRANGEMENT**

**2509.1 Pile dimensions less than 6 feet in height.** Where tires are stored on-tread, the dimension of the pile in the direction of the wheel hole shall not be 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 not be more than 50 feet (15 240 mm) in width.

**2509.2 Pile dimensions greater than 6 feet in height.** Where tires are stored in piles greater than 6 feet (1829 mm) in height, storage shall comply with Chapter 23.”

218. Subsection 2601.2, “Permits,” of Section 2601, “General,” of Chapter 26, “Welding and Other Hot Work,” of the 2006 International Fire Code is amended to read as follows:

**“2601.2 Permits.** Permits shall be required as set forth in Section 105.6. A separate permit is required for each separate activity and location where these activities are being conducted. A permit expires one year from the date of issuance.”

219. Subsection 2602.1, “Definitions,” of Section 2602, “Definitions,” of Chapter 26, “Welding and Other Hot Work,” of the 2006 International Fire Code is amended to read as follows:

**“2602.1 Definitions.** The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

**HOT WORK.** Operations including cutting, welding, Thermit welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation or torch-applied roof systems or any other similar activity.

**HOT WORK AREA.** The area exposed to sparks, hot slag, radiant heat, or convective heat as a result of the hot work.

**HOT WORK EQUIPMENT.** Electric or gas welding or cutting equipment use for hot work.

**HOT WORK PERMITS.** Permits allowing ~~[issued by the responsible person at the facility under the hot work permit program permitting]~~ welding or other hot work to be done in locations referred to in Section 2603.~~[3 and pre-permitted 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.~~

**~~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.]~~

**TORCH-APPLIED ROOF SYSTEM.** Bituminous roofing systems using membranes that are adhered by heating with a torch and melting asphalt back coating instead of mopping hot asphalt for adhesion.”

220. Subsection 2603.3, “Hot Work Program Permit,” of Section 2603, “General Requirements,” of Chapter 26, “Welding and Other Hot Work,” of the 2006 International Fire Code is deleted.

221. Paragraph 2604.1.2, “Openings,” of Subsection 2604.1, “Protection of Combustibles,” of Section 2604, “Fire Safety Requirements,” of Chapter 26, “Welding and Other Hot Work,” of the 2006 International Fire Code is amended to read as follows:

**“2604.1.2 Openings.** Openings or cracks in walls, floors, ducts or shafts within the hot work area shall be tightly covered to prevent the passage of sparks to adjacent combustible areas, or shielded by metal fire-resistant guards, or curtains shall be provided to prevent passage of sparks or slag. Where hot work is performed above locations where persons are likely to pass, noncombustible shields shall be used for protection from sparks and hot metal or oxide.”

222. Paragraph 2604.2.1, “When Required,” of Subsection 2604.2, “Fire Watch,” of Section 2604, “Fire Safety Requirements,” of Chapter 26, “Welding and Other Hot Work,” of the 2006 International Fire Code is amended to read as follows:

**“2604.2.1 When required.** A fire watch shall be provided during hot work activities and shall continue for a minimum of 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.”

223. Subsection 2604.3, “Area Reviews,” of Section 2604, “Fire Safety Requirements,” of Chapter 26, “Welding and Other Hot Work,” of the 2006 International Fire Code is amended to read as follows:

**“2604.3 Area reviews.** Before hot work is permitted and at least once per day while the permit is in effect, the area shall be inspected by the individual responsible for the ~~[authorizing]~~ hot work operations to ensure that it is a fire safe area. ~~[Information shown on the permit shall be verified prior to signing the permit in accordance with Section 105.6.]~~”

224. Subsection 2605.5, “Remote Locations,” of Section 2605, “Gas Welding and Cutting,” of Chapter 26, “Welding and Other Hot Work,” of the 2006 International Fire Code is amended to read as follows:

**“2605.5 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 of 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.”

225. Subsection 2606.4, “Emergency Disconnect,” of Section 2606, “Electric Arc Hot Work,” of Chapter 26, “Welding and Other Hot Work,” of the 2006 International Fire Code is amended to read as follows:

**“2606.4 Emergency disconnect.** A switch or circuit breaker shall be provided so that fixed electric welders and control equipment can be disconnected from the supply circuit. The disconnect shall be installed in accordance with the Dallas [ICC] Electrical Code. The disconnect shall be marked EMERGENCY DISCONNECT and shall be visible from the equipment.”

226. Subsection 2701.5, “Permits,” of Section 2701, “General,” of Chapter 27, “Hazardous Materials—General Provisions,” of the 2006 International Fire Code is amended by adding a new Paragraph 2701.5.3, “Plan Review,” to read as follows:

**“2701.5.3 Plan review.** Plans detailing outdoor storage, dispensing, use and handling of hazardous materials shall be submitted for review and approval to the fire chief. Plans shall include, but not be limited to, 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.

**2701.5.3.1 Plan review fees.** Plans for hazardous materials shall be accompanied by a nonrefundable \$75 review fee.”

227. Subsection 2703.12, “Outdoor Control Areas,” of Section 2703, “General Requirements,” of Chapter 27, “Hazardous Materials—General Provisions,” of the 2006 International Fire Code is amended to read as follows:

**“2703.12 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 a minimum of 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. A 2-hour fire-resistance-rated wall without openings extending not less than 30 inches (762 mm) above and to the sides of the storage area is allowed in lieu of such distance.
3. Where a property exceeds 10,000 square feet (929 m<sup>2</sup>), a group of two outdoor control areas is allowed when approved and when 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 m<sup>2</sup>), additional groups of outdoor control areas are allowed when approved and when 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.

228. Subsection 2704.13, “Weather Protection,” of Section 2704, “Storage,” of Chapter 27, “Hazardous Materials—General Provisions,” of the 2006 International Fire Code is amended to read as follows:

**“2704.13 Weather protection.** Where overhead noncombustible construction is provided for sheltering outdoor hazardous material storage areas, such storage shall not be considered indoor storage when the area is constructed in accordance with the requirements for weather protection as required by Section 414.6 of the *Dallas [International] Building Code*.

**Exception:** Storage of explosive materials shall be considered as indoor storage.”

229. Paragraph 2705.4.4, “Emergency Alarm,” of Subsection 2705.4, “Handling,” of Section 2705, “Use, Dispensing and Handling,” of Chapter 27, “Hazardous Materials—General Provisions,” of the 2006 International Fire Code is amended to read as follows:

**“2705.4.4 Emergency alarm.** Where hazardous materials having a hazard ranking of 3 or 4 in accordance with NFPA 704 are transported through corridors or exit enclosures, 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 station, proprietary supervising station or remote supervising station or a constantly attended on-site location and shall also

initiate a local audible alarm. 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.

230. Chapter 27, “Hazardous Materials—General Provisions,” of the 2006 International Fire Code is amended by adding a new Section 2706, “Prohibited Hazardous Materials Area,” to read as follows:

**“SECTION 2706  
PROHIBITED HAZARDOUS MATERIALS AREA**

**2706.1 General.** No person shall transport hazardous materials within the city unless the person’s destination or point of departure is a Dallas terminal or other location within the city.

**2706.2 Approved route.** The prohibition of Section 2706.1 shall not apply if the hazardous materials are transported on the following:

1. Lyndon B. Johnson Freeway (Interstate Highway 635) and connecting segments of Interstate Highway 20, Spur 408, Walton Walker Boulevard (Loop 12) and Stemmons Freeway (Interstate Highway 35 East).
2. A state or federal highway directly connecting the route described in Section 2706.3 outward to the city limits.

**2706.3 Prohibited hazardous materials areas.** No person shall transport hazardous materials requiring U.S. Department of Transportation hazardous materials warning placards on the following streets and public highways and segments of streets and public highways:

1. R.L. Thornton Freeway (Interstate Highway 30) from Stemmons Freeway (Interstate Highway 35 East) to Malcolm X Boulevard.
2. Julius Schepps Freeway (Interstate Highway 45) from Lamar Street to Central Expressway (Interstate Highway 345) elevated bypass.
3. Central Expressway (Interstate Highway 345) elevated bypass from Julius Schepps Freeway (Interstate Highway 45) to Bryan Street.
4. Woodall Rodgers Freeway (Spur 366), all portions within the city limits.
5. Underground tunnel systems.”

231. Subsection 2804.4, “Storage in Aerosol Warehouses,” of Section 2804, “Inside Storage of Aerosol Products,” of Chapter 28, “Aerosols,” of the 2006 International Fire Code is amended by adding a new Paragraph 2804.4.5, “Access,” to read as follows:

**“2804.4.5 Access.** Fire department access roadways and access doors shall be in accordance with Section 503.”

232. Subsection 3006.2, “Interior Supply Location,” of Section 3006, “Medical Gas Systems,” of Chapter 30, “Compressed Gases,” of the 2006 International Fire Code is amended to read as follows:

**“3006.2 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 exempt [~~permit~~] amount are located inside buildings, they shall be in a 1-hour exterior room, a 1-hour interior room or a gas cabinet in accordance with Section 3006.2.1, 3006.2.2 or 3006.2.3.”

233. Subsection 3301.1, “Scope,” of Section 3301, “General,” of Chapter 33, “Explosives and Fireworks,” of the 2006 International Fire Code is amended to read as follows:

**“3301.1 Scope.** The provisions of this chapter shall govern the possession, manufacture, storage, handling, transportation, sale and use of explosives, explosive materials, fireworks and small arms ammunition.

**Exceptions:**

1. The Armed Forces of the United States, Coast Guard or National Guard.
2. Explosives in forms prescribed by the official United States Pharmacopoeia.
3. The possession, storage, transportation and use of small arms ammunition when packaged in accordance with DOTn packaging requirements.
4. The possession, storage, transportation and use of not more than 1 pound (0.454 kg) of commercially manufactured sporting black powder, 20 pounds (9 kg) of smokeless powder and 10,000 small arms primers for hand loading of small arms ammunition for personal consumption.

5. The transportation and use of explosive materials by federal, state and local regulatory, law enforcement and fire agencies acting in their official capacities.
6. Special industrial explosive devices which in the aggregate contain less than 50 pounds (23 kg) of explosive materials.
7. The possession, storage, transportation and use of blank industrial-power load cartridges when packaged in accordance with DOTn packaging regulations.
8. Transportation in accordance with DOTn 49 CFR Parts 100-178.
9. Items preempted by federal regulations.”

234. Paragraph 3301.1.3, “Fireworks,” of Subsection 3301.1, “Scope,” of Section 3301, “General,” of Chapter 33, “Explosives and Fireworks,” of the 2006 International Fire Code is amended to read as follows:

**“3301.1.3 Fireworks.** The possession, manufacture, storage, sale, handling, transportation and use of fireworks are prohibited.

**Exception[s]:**

- [1-] The display, storage, transportation [~~Storage~~] and handling of fireworks when approved and permitted as provided [~~allowed~~] in Sections 3304 and 3308.
- [2-] ~~Manufacture, assembly and testing of fireworks as allowed in Section 3305.~~
3. ~~The use of fireworks for display as allowed in Section 3308.~~
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 100-178, for consumer fireworks.]”~~

235. Subsection 3302.1, “Definitions,” of Section 3302, “Definitions,” of Chapter 33, “Explosives and Fireworks,” of the 2006 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.

**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 break, having two or more effects.

**DESIGNATED LANDING AREA.** The area over which aerial shells are fired and into which debris and malfunctioning aerial shells can fall.

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

**Fireworks, 1.4G.** (Formerly known as Class C, Common Fireworks.) Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects of combustion. Such 1.4G fireworks which comply with the construction, chemical composition and labeling regulations of the DOTn for Fireworks, UN 0336, and 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.** (Formerly Class B, Special Fireworks.) 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, UN0335 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.

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

**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.

**TEMPORARY STORAGE.** The storage of pyrotechnic special effects material on site for a period of 72 hours or less.”

236. Section 3308, “Fireworks Display,” of Chapter 33, “Explosives and Fireworks,” of the 2006 International Fire Code is retitled as Section 3308, “Fireworks Display and Pyrotechnic Special Effects Material,” and amended to read as follows:

**“SECTION 3308  
FIREWORKS DISPLAY AND PYROTECHNIC  
SPECIAL EFFECTS MATERIAL**

**3308.1 General.** 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 3308, [this chapter and] NFPA 1123, [or] NFPA 1126, Chapter 2154 of the *Texas Occupations Code*, and the *Texas Fireworks Rules*.

**3308.1.1 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.

**3308.1.2 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.

**3308.2 Permits [application].** 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.

**3308.2.1 Fireworks general [~~Outdoor displays~~].** Manufacturing, display and demonstration [~~In addition to the requirements~~] of [~~Section 403, permit applications for outdoor~~] fireworks [~~displays using Division 1.3G fireworks~~] shall comply with this chapter and NFPA 1123 or NFPA 1126 [~~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~~].

**3308.2.1.1 Manufacturing.** The manufacturing of fireworks is prohibited except under special permits as required by local and state regulations.

**3308.2.1.2 Outdoor displays.** Permits are required to conduct a fireworks display. See Section 105.6. In addition to the requirements of Section 403, permit applications for outdoor fireworks displays using Division 1.3G fireworks shall be submitted not less than 15 days prior to the scheduled date of display and shall include:

1. Site plans prepared by the display operator, sponsor or both.
2. A site diagram of the display site drawn to scale which shall include identifying significant ground features, public rights of way, significant buildings or structures, overhead obstructions, location of nearby trees, telegraph or telephone lines, parking areas and spectator viewing areas at which the display will be conducted. The site diagram shall also include the site from which fireworks will be discharged and the lines behind which the audience will be restrained.
3. The location of fireworks storage areas.
4. The fallout area, including dimensions.
5. A north arrow.
6. Likely wind direction.
7. The location of significant roadways and utilities including access and control points.
8. Traffic plans indicating the flow of vehicles into and out of the site before and after the display.

9. The location of emergency vehicle staging areas and access routes. At the time of permit application, the fire code official shall be consulted regarding requirements for standby fire apparatus.
10. Diagrams illustrating the general arrangement and size of mortars and the location of shell storage at the discharge site. The diagrams should include the location of the electrical firing unit.
11. The Texas Department of Insurance application for permit and site certification and a copy of the state permit once approved by the Texas Department of Insurance.
12. A certificate of insurance as required in Section 3308.5.2.2.
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.

**3308.2.1.3 Proximate audience displays.** Where the separation distances required by Section 3308 and NFPA 1123 are unavailable or cannot be secured, only proximate audience displays conducted in accordance with NFPA 1126 are permitted. Permits are required to conduct a special effects display. See Section 105.6. Permit application shall be made not less than 15 days prior to the scheduled date of the display. In addition to the requirements of Section 403, permit applications for special effects pyrotechnic material using Division 1.4G fireworks shall include:

1. The name of the person, group or organization sponsoring the production.
2. The date and time of day of the production.
3. The exact location of the production.
4. The name of the pyrotechnic operator.
5. The number, names and ages of all assistants who are to be present.
6. The qualifications of the pyrotechnic operator.
7. The pyrotechnic experience of the operator.

8. Confirmation of any applicable state and federal licenses held by the operator or assistants.
9. Evidence of the permittee's insurance carrier or financial responsibility.
10. The number and type of pyrotechnic devices and materials to be used, the operator's experience with those devices and effects, and a definition of the general responsibility of the assistants.
11. A diagram of the grounds of the facilities where the production is to be held. This diagram shall show the point at which the pyrotechnic devices are to be fired, the fallout radius for each pyrotechnic device used in the performance, and the lines behind which the audience shall be restrained.
12. The point of on-site assembly of pyrotechnic devices.
13. The manner and place of storage of the pyrotechnic materials and devices.
14. The 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.

**3308.2.1.4 Pyrotechnics demonstration.** The fire code official shall approve a walk-through 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.

**3308.2.2 Pyrotechnic special effects material** ~~**[Proximate audience displays].**~~ A ~~[Where the separation distances required by Section 3308.4 and NFPA 1123 are unavailable or cannot be secured, only proximate audience displays conducted in accordance with NFPA 1126 shall be allowed. Applications for proximate audience]~~ display[s] permit is ~~[shall include plans indicating the]~~ required to use pyrotechnic special effects material. A permit for use shall be granted only to a pyrotechnic operator licensed by the State of Texas. See Section 105.6 ~~[clearances for spectators and combustibles, crowd control measures, smoke control measures, and~~

requirements for standby personnel and equipment when provision of such personnel or equipment is required by the fire code official].

**3308.2.3 Transportation and storage.** A permit is required for the transportation and storage of fireworks. See Section 105.6.

**3308.3 Refusal to issue permit** ~~[Approved displays]~~. The fire code official ~~[Approved displays]~~ shall refuse to approve issuance of a permit if the applicant ~~[include only the approved Division 1.3G, Division 1.4G, and Division 1.4S fireworks, shall be handled by an approved competent operator, and the fireworks shall be arranged, located, discharged and fired in a manner that will not pose a hazard to property or endanger any person.];~~

1. Intentionally makes a false statement as to a material matter in the permit application;
2. Is a fugitive from justice;
3. Is under a felony indictment;
4. Has been finally convicted of a felony offense within the 5-year period immediately preceding the filing of the application;
5. Has been finally convicted of a misdemeanor violation of an explosive law or regulation within the 2-year period immediately preceding the filing of the application;
6. Held a permit issued under this chapter which was revoked within the 1-year period immediately preceding the filing of the application;
7. Has been adjudicated a mental defective; is an unlawful user of, or is addicted to, a controlled substance or dangerous drug; or suffers from any other handicap, infirmity, defect or condition which might reasonably diminish competency to safely conduct the proposed activity or would create an unreasonable risk of injury to life or property in the performance of the proposed activity;
8. Submits an application which indicates that the proposed display will not comply with the provisions of this chapter; or
9. Proposes a display which will create an unreasonable risk of injury to life or property in the performance of the proposed activity.

**3308.4 Violations** ~~[Clearance]~~. A person who knowingly violates a provision of this chapter ~~[Spectators, spectator parking areas, and dwellings, buildings or structures]~~ shall ~~[not]~~ be fined not less than \$200 nor more than \$2000 for each offense ~~[located within the display site]~~.

**Exceptions:**

1. This provision shall not apply to pyrotechnic special effects and 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.]

**3308.4.1 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.

**3308.5 Storage, use and handling of fireworks [at display site].** [The] S[s]torage, use and handling of fireworks [at the display site] shall be in accordance [comply] with [the requirements of this] S[s]ections 3304 and 3308, 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.

**3308.5.1 Prohibition [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 3308.5.

**3308.5.2 Displays [Weather protection].** Fireworks displays shall be in accordance with Sections 3308.5.2.1 through 3308.5.2.9.7.9. 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 3304 [kept dry after

delivery to the display site].

**3308.5.2.1 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.

**3308.5.2.2 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.

**3308.5.2.3 Mortars for aerial shell displays.** Mortars for aerial shell displays shall be in accordance with Sections 3308.5.2.3.1 through 3308.5.2.3.12.

**3308.5.2.3.1 Site criteria.** Mortars for aerial displays shall be separated from spectator viewing areas, vehicles and buildings as set forth in Table 3308.5.2.3.

**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.

**3308.5.2.3.2 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.

**3308.5.2.3.3 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.

**3308.5.2.3.4 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.

**3308.5.2.3.5 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.

**3308.5.2.3.6 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.

**3308.5.2.3.7 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.

**3308.5.2.3.8 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.

**3308.5.2.3.9 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.

**3308.5.2.3.10 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.

**3308.5.2.3.11 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.

**3308.5.2.3.12 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.

**TABLE 3308.5.2.3**  
**MINIMUM MORTAR SEPARATION DISTANCES**

<b><u>MORTAR DIAMETER (INCHES)</u></b>	<b><u>MINIMUM SEPARATION FROM SPECTATOR VIEWING AREAS, VEHICLES AND BUILDINGS (feet)</u></b>
<u>X25.4 for mm</u>	<u>X 0.3048 for m</u>
<u>less than 3</u>	<u>140</u>
<u>3</u>	<u>210</u>
<u>4</u>	<u>280</u>
<u>5</u>	<u>350</u>
<u>6</u>	<u>420</u>
<u>7</u>	<u>490</u>
<u>8</u>	<u>560</u>
<u>10</u>	<u>700</u>
<u>12</u>	<u>840</u>
<u>greater than 12</u>	<u>Approved</u>

**3308.5.2.4 Ground pieces.** Ground pieces shall be in accordance with Sections 3308.5.2.4.1 through 3308.5.2.4.3.

**3308.5.2.4.1 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.

**3308.5.2.4.2 Combustibles.** The area beneath ground pieces shall be free of dry grass and combustibles.

**3308.5.2.4.3 Securing.** Poles for ground pieces shall be securely placed and braced.

**3308.5.2.5 Electrical firing units.** Electrical firing units shall be in accordance with Sections 3308.5.2.5.1 through 3308.5.2.5.6.

**3308.5.2.5.1 Wiring.** Electrical wiring associated with an electrical firing unit shall be prevented from contacting metal objects in contact with the ground.

**3308.5.2.5.2 Power supply.** AC-powered electrical firing units shall be isolated from the power source using an isolation transformer.

**3308.5.2.5.3 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.

**3308.5.2.5.4 Manually activated firing units.** Manually activated electrical firing units shall require two or more distinct actions to apply electric current to an electric match.

**3308.5.2.5.5 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.

**3308.5.2.5.6 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.

**3308.5.2.6 Supervision.** Beginning as soon as fireworks have been delivered to the display site, they shall not be left unattended.

**3308.5.2.7 Weather protection.** Fireworks shall be kept dry after delivery to the display site.

**3308.5.2.8 Display operation.** Display operation shall be in accordance with Sections 3308.5.2.8.1 through 3308.5.2.8.6.7.

**3308.5.2.8.1 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.

**3308.5.2.8.2 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.

**3308.5.2.8.3 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.

**3308.5.2.8.4 Illumination.** Display operators shall use only flashlights or electric lighting for illumination.

**3308.5.2.8.5 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.

**3308.5.2.8.6 Aerial shells.** Aerial shell operations shall be in accordance with Sections 3308.5.2.9.7.1 through 3308.5.2.9.7.9.

**3308.5.2.8.6.1 Ready boxes.** Ready boxes shall be located not less than 25 feet (7620 mm) in an upwind direction from mortars.

**3308.5.2.8.6.2 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.

**3308.5.2.8.6.3 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.

**3308.5.2.8.6.4 Safety cap.** The safety cap protecting a fuse shall not be removed until immediately before an aerial shell is to be fired.

**3308.5.2.8.6.5 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.

**3308.5.2.8.6.6 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.

**3308.5.2.8.6.7 Record.** The pyrotechnic operator shall keep a record of aerial shells that fail to ignite or fail to function.

**3308.5.4 Sorting and separation.** ~~After delivery to the display site and prior to the 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~~

**3308.5.5 Ready boxes.** ~~Display fireworks (Division 1.3G) that will be temporarily stored at the site during the fireworks display shall be stored in ready boxes located upwind and at least 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.]~~

**3308.6 Pyrotechnic special effects material [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 3308.6.1 through 3308.6.7.3. Permanent storage of pyrotechnic special effects material shall be in accordance with Section 3304 [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].

**3308.6.1 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.

**3308.6.2 Construction of magazines.** Magazines used for the storage of pyrotechnic special effects material shall be constructed in accordance with Section 3304.6.

**3308.6.3 Storage.** Storage of fireworks and pyrotechnic special effects material shall be in accordance with Sections 3308.6.3.1 through 3308.6.3.6.

**3308.6.3.1 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 3304 and Table 3304.3.

**3308.6.3.2 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 3304. Containers of explosive materials shall be closed when stored. For amounts and requirements for indoor and outdoor storage see Section 3304.

**3308.6.3.3 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.

**3308.6.3.4 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.

**3308.6.3.5 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.

**3308.6.3.6 Tools.** Tools used for opening or closing containers of explosive materials shall be of nonsparking 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 nonsparking transfer conveyors, shall not be stored in magazines containing high explosives.

**Exception:** Metal slitters are allowed to be used for opening fiberboard containers.

**3308.6.4 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.

**3308.6.5 Housekeeping.** Housekeeping shall be in accordance with Section 3304.8.1.

**3308.6.6 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.

**3308.6.7 Use of pyrotechnic special effects material.** Use of pyrotechnic special effects material shall be in accordance with Sections 3308.6.7.1 through 3308.6.7.3.

**3308.6.7.1 General precautions.**

**3308.6.7.1.1 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.

**3308.6.7.1.2 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.

**3308.6.7.1.3 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.

**3308.6.7.1.4 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.

**3308.6.7.1.5 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.

**3308.6.7.2 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.

**3308.6.7.3 Surplus materials.** Surplus materials shall be properly stored until they can be disposed of in a safe manner.

**3308.7 Standby personnel and equipment [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.]~~

**3308.8 Display supervision.** Whenever in the opinion of the fire code official or the pyrotechnic operator a hazardous condition exists, such as there is a lack of crowd control or that the crowd is in danger, the fireworks display shall be discontinued immediately until such time as the dangerous situation is corrected. If at any time high winds or wet weather creates a danger, the display shall be postponed until weather conditions are acceptable to the fire code official.

**3308.9 Post-display inspection.** After the display, the firing crew shall conduct an inspection of the fallout area for the purpose of locating unexploded aerial shells or live components. This inspection shall be conducted before public access to the site shall be allowed. Such shells shall not be handled within 15 minutes of their firing. 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.

**3308.10 Disposal.** Any shells found during the inspection required in Section 3308.9 shall not be handled until at least 15 minutes have elapsed from the time the shells were fired. ~~The fireworks shall then be doused with water and allowed to remain for at least 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 3304.10.

~~**3308.11 Retail display and sale.** Fireworks displayed for retail sale shall not be made readily accessible to the public. A minimum of one pressurized water portable fire extinguisher complying with Section 906 shall be located not more than 15 feet (4572 mm) and not less than 10 feet (3048 mm) from the hazard. ‘No Smoking’ signs complying with Section 310 shall be conspicuously posted in areas where fireworks are stored or displayed for retail sale.]”~~

237. Subsection 3401.4, “Permits,” of Section 3401, “General,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3401.4 Permits.** Permits shall be required as set forth in Sections 105.6, ~~and~~ 105.7 and 3406.”

238. Subsection 3403.1, “Electrical,” of Section 3403, “General Requirements,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended by adding a new Paragraph 3403.1.4, “Construction Documents,” to read as follows:

**“3403.1.4 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.

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.).

**3403.1.4.1 Plan review fees.** Plans for tanks shall be accompanied by a nonrefundable review fee based on the following:

1. \$75 for each installation involving three or fewer tanks.
2. \$100 for each installation involving more than three tanks.”

239. Subsection 3403.2, “Fire Protection,” of Section 3403, “General Requirements,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended by adding a new Paragraph 3403.2.2, “Access,” to read as follows:

**“3403.2.2 Access.** Fire apparatus access roads for storage, use, dispensing, mixing and handling of flammable and combustible liquids shall be in accordance with Chapter 5.”

240. Subsection 3403.4, “Spill Control and Secondary Containment,” of Section 3403, “General Requirements,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3403.4 Spill control and secondary containment.** Where the maximum allowable quantity per control area is exceeded, and when required by Section 2704.2, rooms, buildings or areas used for storage, dispensing, use, mixing, or handling of flammable and combustible [~~Class I, II and III A~~] liquids shall be provided with spill control and secondary containment in accordance with Section 2704.2.”

241. Subsection 3403.6, “Piping Systems,” of Section 3403, “General Requirements,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3403.6 Piping systems.** Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with this section. An approved method of secondary containment shall be provided for underground tank and piping systems.”

242. Item 3404.2.7.5.1, “Connections Below Liquid Level,” of Subparagraph 3404.2.7.5, “Tank Openings Other Than Vents,” of Paragraph 3404.2.7, “Design, Construction and General Installation Requirements for Tanks,” of Subsection 3404.2, “Tank Storage,” of Section 3404, “Storage,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3404.2.7.5.1 Connections below liquid level.** Connections for tank openings below the liquid level shall be liquid tight. See Section 3403.6.7 for additional requirements.”

243. Paragraph 3404.2.11, “Underground Tanks,” of Subsection 3404.2, “Tank Storage,” of Section 3404, “Storage,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3404.2.11 Underground tanks.** Underground storage of flammable and combustible liquids in tanks shall comply with Section 3404.2 and Sections 3404.2.11.1 through 3404.2.11.5.4[2].”

244. Subparagraph 3404.2.11.3, “Depth and Cover,” of Paragraph 3404.2.11, “Underground Tanks,” of Subsection 3404.2, “Tank Storage,” of Section 3404, “Storage,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3404.2.11.3 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 at least 6

inches (152 mm) of noncorrosive inert material, such as clean sand or gravel well tamped in place or in accordance with the manufacturer's installation instructions. Tanks shall be covered with a minimum of 2 feet (610 mm) of earth or shall be covered by not less than 1 foot (305 mm) of earth, on top of which shall be placed a slab of reinforced concrete not less than 4 inches (102 mm) thick.

When underground tanks are, or are likely to be, subjected to traffic, they shall be protected against damage from vehicles passing over them by at least 3 feet (914 mm) of earth cover, or 18 inches (457 mm) of well-tamped earth plus 6 inches (152 mm) of reinforced concrete, or 8 inches (203 mm) of asphaltic concrete. When asphaltic or reinforced concrete paving is used as part of the protection, it shall extend at least 1 foot (305 mm) horizontally beyond the outline of the tank in all directions.

For tanks built in accordance with Section 3404.2.7, 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 (2134 mm) or the manufacturer's specifications, reinforcements shall be provided in accordance with the tank manufacturer's recommendations.

Nonmetallic underground tanks shall be installed in accordance with the manufacturer's instructions. The minimum depth of cover shall be as specified above."

245. Subparagraph 3404.2.11.5, "Leak Prevention," of Paragraph 3404.2.11, "Underground Tanks," of Subsection 3404.2, "Tank Storage," of Section 3404, "Storage," of Chapter 34, "Flammable and Combustible Liquids," of the 2006 International Fire Code is amended to read as follows:

**"3404.2.11.5 Leak prevention.** Leak prevention for underground tanks shall comply with Sections 3404.2.11.5.1 through ~~and~~ 3404.2.11.5.4<sup>[2]</sup>.

**3404.2.11.5.1 Inventory control.** Daily inventory records shall be maintained for underground storage tank systems.

**3404.2.11.5.2 Leak detection.** Underground storage tank systems shall be provided with an approved method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30 and as specified in Section 3404.2.11.5.3.

**3404.2.11.5.3 Dry sumps.** Approved sampling tubes of a minimum of 6 inches (152 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.

**3404.2.11.5.4 Secondary containment.** An approved method of secondary containment shall be provided for underground tank and piping systems.”

246. Subparagraph 3404.2.12.1, “Acceptance Testing,” of Paragraph 3404.2.12, “Testing,” of Subsection 3404.2, “Tank Storage,” of Section 3404, “Storage,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3404.2.12.1 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 4.4 of NFPA 30.”

247. Item 3404.2.13.1.4, “Tanks Abandoned in Place,” of Subparagraph 3404.2.13.1, “Underground tanks,” of Paragraph 3404.2.13, “Abandonment and Status of Tanks,” of Subsection 3404.2, “Tank Storage,” of Section 3404, “Storage,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3404.2.13.1.4 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.

**Exception:** Residential heating oil tanks of 1,100 gallons (4164 L) or less, provided the fill line is permanently removed to a point below grade to prevent refilling of the tank..

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.

248. Subparagraph 3404.2.14.1, "Removal," of Paragraph 304.2.14, "Removal and Disposal of Tanks," of Subsection 3404.2, "Tank Storage," of Section 3404, "Storage," of Chapter 34, "Flammable and Combustible Liquids," of the 2006 International Fire Code is amended to read as follows:

"3404.2.14.1 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 0.125-inch to ¼-inch-diameter (3.2 mm to 6.4 mm) opening for pressure equalization.
5. Tanks shall be purged of vapor and inerted prior to removal.

6. All exterior above-grade fill and vent piping shall be permanently removed.

**Exception:** Piping associated with bulk plants, terminal facilities and refineries.

7. Removal of tanks shall be in the presence of the fire code official.

249. Paragraph 3406.5.4, “Dispensing From Tank Vehicles and Tank Cars,” of Subsection 3406.5, “Bulk Transfer and Process Transfer Operations,” of Section 3406, “Special Operations,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3406.5.4 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 3406.5.4.1 through 3406.5.4.5.2]. 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.”

250. Subparagraph 3406.5.4.3, “Aircraft Fueling,” of Paragraph 3406.5.4, “Dispensing From Tank Vehicles and Tank Cars,” of Subsection 3406.5, “Bulk Transfer and Process Transfer Operations,” of Section 3406, “Special Operations,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3406.5.4.3 Aircraft fueling.** Transfer of liquids from tank vehicles to the fuel tanks of aircraft shall be in accordance with Chapter 11. Mobile fuel dispensing vehicles are prohibited from dispensing flammable or combustible liquids into the fuel tanks of aircraft on nonairport property.

**Exception:** Requests for temporary dispensing of flammable or combustible liquids into the fuel tanks of aircraft on nonairport property will be reviewed on an individual basis. If approved by the fire chief, standby personnel shall be required. Aircraft engines shall be shut off during the dispensing operation. Additionally, the fire chief may require a standby fire engine with fire personnel during the temporary operation. Charges for standby personnel shall be as normally calculated by the fire department.”

251. Subparagraph 3406.5.4.5, “Commercial, Industrial, Governmental or Manufacturing,” of Paragraph 3406.5.4, “Dispensing From Tank Vehicles and Tank Cars,” of Subsection 3406.5, “Bulk Transfer and Process Transfer Operations,” of Section 3406, “Special Operations,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3406.5.4.5 Commercial, industrial, governmental or manufacturing. Dispensing of motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles shall comply with Sections 3406.5.4.5.1 and 3406.5.4.5.2.**

**3406.5.4.5.1 Class I flammable liquids.** Mobile fuel dispensing vehicles may not dispense Class I flammable liquids into the fuel tanks of motor vehicles.

**Exception:** Requests for temporary dispensing of Class I flammable liquids will be reviewed on an individual basis. If approved by the fire chief, a 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.

**3406.5.4.5.2 Class II and III flammable liquids.** 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 property 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 may 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 or combustible storage.
7. The tank vehicle shall comply with the requirements of NFPA 385 and local, state and federal requirements. The tank vehicle's specific functions shall include that of supplying fuel to motor vehicle fuel tanks. The vehicle and all its equipment shall be maintained in good repair.
8. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the tank vehicle or the point of fueling shall be prominently posted on three sides of the vehicle including the back and both sides.
9. A portable fire extinguisher with a minimum rating of 40:BC shall be provided on the vehicle with signage clearly indicating its location.
10. The dispensing nozzles and hoses shall be of an approved and listed type.
11. The dispensing hose shall not be extended from the reel more than 100 feet (30 480 mm) in length.
12. Absorbent materials, nonwater-absorbent pads, a 10-foot-long (3048 mm) containment boom, an approved container with lid and a nonmetallic shovel shall be provided to mitigate a minimum 5-gallon (19 L) fuel spill.
13. Tank vehicles shall be equipped with a 'fuel limit' switch such as a count-back switch, to limit the amount of a single fueling operation to 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 shut-off device which, when activated, immediately causes flow of fuel from the tank vehicle to cease.

14. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak or spill. Training records shall be maintained by the dispensing company 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. Prior to beginning dispensing operations, precautions shall be taken to ensure ignition sources are not present.
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. A 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.”

252. Subsection 3406.7, “Refineries,” of Section 3406, “Special Operations,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3406.7 Refineries.** Plants and portions of plants in which flammable liquids are produced on a scale from crude petroleum, natural gasoline or other hydrocarbon sources shall be in accordance with Sections 3406.7.1 through 3406.7.3. Petroleum-processing plants and facilities or portions of plants or facilities in which flammable or combustible liquids are handled, treated or produced on a commercial scale from crude petroleum, natural gasoline, or other hydrocarbon sources shall also be in accordance with API 651, API 653, API 752, API 1615, API 2001, API 2003, API 2009, API 2015, API 2016 [2023], API 2201 and API 2350.”

253. Paragraph 3406.7.3, “Storage of Heated Petroleum Products,” of Subsection 3406.7, “Refineries,” of Section 3406, “Special Operations,” of Chapter 34, “Flammable and Combustible Liquids,” of the 2006 International Fire Code is amended to read as follows:

**“3406.7.3 Storage of heated petroleum products.** Where petroleum-derived asphalts and residues are stored in heated tanks at refineries and bulk storage facilities or in tank vehicles, such products shall be in accordance with API 2016[23].”

254. Subsection 3504.2, “Outdoor Storage,” of Section 3504, “Storage,” of Chapter 35, “Flammable Gases,” of the 2006 International Fire Code is amended by adding a new Paragraph 3504.2.2, “Access,” to read as follows:

**“3504.2.2 Access.** Outdoor storage of flammable gas shall be provided with fire department access and fire hydrant availability in accordance with Chapter 5.”

255. Subsection 3604.2, “Outdoor Storage,” of Section 3604, “Storage,” of Chapter 36, “Flammable Solids,” of the 2006 International Fire Code is amended by adding a new Paragraph 3604.2.3, “Access,” to read as follows:

**“3604.2.3 Access.** Outdoor storage of flammable solids shall be provided with fire department access and fire hydrant availability in accordance with Chapter 5.”

256. Subsection 3606.3, “Storage of Pigs, Ingots and Billets,” of Section 3606, “Magnesium,” of Chapter 36, “Flammable Solids,” of the 2006 International Fire Code is amended by adding a new Paragraph 3606.3.3, “Access,” to read as follows:

**“3606.3.3 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.”

257. Subparagraph 3704.2.2.9, “Automatic Fire Detection System—Highly Toxic Compressed Gases,” of Paragraph 3704.2.2, “General Indoor Requirements,” of Subsection 3704.2, “Indoor Storage and Use,” of Section 3704, “Highly Toxic and Toxic Compressed Gases,” of Chapter 37, “Highly Toxic and Toxic Materials,” of the 2006 International Fire Code is amended to read as follows:

**“3704.2.2.9 Automatic fire detection system—highly toxic compressed gases.** An approved supervised 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.”

258. Section 3801, “General,” of Chapter 38, “Liquefied Petroleum Gases,” of the 2006 International Fire Code is amended to read as follows:

### **“SECTION 3801 GENERAL**

**3801.1 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*.

**3801.2 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.

**3801.2.1 Permit duration.** A permit expires on the earliest of the following dates:

1. On the expiration date shown on the permit.
2. When the permittee completes the permitted activity.
3. When the permittee abandons the permitted activity.
4. If the permittee is an employee conducting the permitted activity within the course and scope of employment, when the employer's permit expires or is revoked, whichever occurs first.

**3801.2.2 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.

**3801.3 Construction documents.** Where a single container is more than 2,000 gallons (7570 L) in water capacity or the aggregate capacity of containers is more than 4,000 gallons (15 140 L) in water capacity, 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 fire code 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.).

**3801.3.1 Plan review fees.** Plans for tanks shall be accompanied by a nonrefundable review fee based on the following:

1. \$75 for each installation involving three or fewer tanks.

2. \$100 for each installation involving more than three tanks.

**3801.4 LP-gas equipment.** All LP-gas devices shall be listed for their intended use.”

259. Subparagraph 3803.2.1.5, “Demonstration Uses,” of Paragraph 3803.2.1, “Portable Containers,” of Subsection 3803.2, “Use of LP-Gas Containers in Buildings,” of Section 3803, “Installation of Equipment,” of Chapter 38, “Liquefied Petroleum Gases,” of the 2006 International Fire Code is amended to read as follows:

**“3803.2.1.5 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 2405.”

260. Paragraph 3803.2.1, “Portable Containers,” of Subsection 3803.2, “Use of LP-Gas Containers in Buildings,” of Section 3803, “Installation of Equipment,” of Chapter 38, “Liquefied Petroleum Gases,” of the 2006 International Fire Code is amended by adding a new Subparagraph 3803.2.1.8, “Jewelry Repair, Dental Labs and Similar Occupancies,” to read as follows:

**“3803.2.1.8 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 47.6-pound (22 kg) water capacity. Aggregate capacity shall not

exceed 60-pound (27 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.”

261. Subsection 3804.2, “Maximum Capacity Within Established Limits,” of Section 3804, “Location of Containers,” of Chapter 38, “Liquefied Petroleum Gases,” of the 2006 International Fire Code is amended to read as follows:

**“3804.2 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 Ordinance for Adoption of the International Fire Code on page v~~].

**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 containers, degree of fire protection to be provided and capabilities of the local fire department.
2. Except as permitted in Sections 308.3 and 3804.3.2, LP-gas containers are not permitted in residential areas.”

262. Subsection 3804.3, “Container Location,” of Section 3804, “Location of Containers,” of Chapter 38, “Liquefied Petroleum Gases,” of the 2006 International Fire Code is amended by adding a new Paragraph 3804.3.2, “Spas, Pool Heaters and Other Listed Devices,” to read as follows:

**“3804.3.2 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. See Table 3804.3 for location of containers.”

263. Subsection 4004.2, “Outdoor Storage,” of Section 4004, “Storage,” of Chapter 40, “Oxidizers,” of the 2006 International Fire Code is amended by adding a new Paragraph 4004.2.5, “Access,” to read as follows:

**“4004.2.5 Access.** Outdoor storage for oxidizers shall be provided with fire department access and fire hydrant availability in accordance with Chapter 5.”

264. The API Standards of Chapter 45, “Referenced Standards,” of the 2006 International Fire Code are amended to read as follows:

**“API**

American Petroleum Institute  
1220 L Street, Northwest  
Washington, DC 20005

Standard reference number	Title	Referenced in code section number
Spec 12P—(1995) (Reaffirmed 2000)	Specification for Fiberglass Reinforced Plastic Tanks . . . . .	3404.2.13.1.5
RP 651—(1997)	Cathodic Protection of Aboveground Petroleum Storage Tanks . . . .	3406.7, 3406.7.1
Std 653—(2001)	Tank Inspection, Repair, Alteration and Reconstruction . . . . .	3406.7
RP 752—(2003)	Management of Hazards Associated with Location of Process Plant Buildings, CMA Managers Guide . . . . .	3406.7
RP 1604—(1996)	Closure of Underground Petroleum Storage Tanks . . . . .	3404.2.13
RP 1615—(1996)	Installation of Underground Petroleum Storage Systems . . . . .	3404.2.13.1.5, 3406.7
Std 2000—(1998)	Venting Atmosphere and Low Pressure Storage Tanks: Nonrefrigerated and Refrigerated . . . . .	3404.2.7.3.6
RP 2001—(2005)	Fire Protection in Refineries, 8 <sup>th</sup> Edition . . . . .	3406.7
RP 2003—(1998)	Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents . . . . .	3406.7
Publ 2009—(2002)	Safe Welding and Cutting Practices in Refineries, Gas Plants and Petrochemical Plants . . . . .	3406.7
Std 2015—(2001)	Safe Entry and Clearing of Petroleum Storage Tanks . . . . .	3406.7, 3406.7.2
RP 2016—2001	Guide for Entry and Cleaning of Petroleum Storage Tanks . . . . .	3406.7, 3406.7.3
[RP 2023—2001	Guide for Safe Storage and Handling of Heated Petroleum Derived Asphalt Products and Crude Oil Residue . . . . .	3406.7, 3406.7.3]
Publ 2028—(2002)	Flame Arrestors in Piping Systems . . . . .	3404.2.7.3.2
Publ 2201—(2003)	Procedures for Welding or Hot Tapping on Equipment in Service . . . . .	3406.7
RP 2350—(2005)	Overfill Protection for Storage Tanks in Petroleum Facilities, 3 <sup>rd</sup> Edition . . . . .	3404.2.7.5.8, 3406.4.6, 3406.7”

265. The CGR Standard of Chapter 45, “Referenced Standards,” of the 2006 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, 32, 35 & 39—2001[1999]	Shipping . . . . .	3406.8”

266. The CPSC Standards of Chapter 45, “Referenced Standards,” of the 2006 International Fire Code are amended to read as follows:

**“CPSC**

Consumer Product Safety Commission  
4330 East West Highway  
Bethesda, MD 20814

Standard reference number	Title	Referenced in code section number
16 CFR Part 1500.41—1984	Method for Testing Primary Irritant Substances . . . . .	202
16 CFR Part 1500.42—1984	Test for Eye Irritants . . . . .	202
16 CFR Part 1500.44— <del>2002</del> [2004]	Method for Testing Extremely Flammable and Flammable Solids . . . . .	3602.1
16 CFR Part 1500— <del>2002</del> [1984]	Hazardous Substances and Articles; Administration and Enforcement Regulations . . . . .	3301.1.3, 3302.1
16 CFR Part 1507— <del>2002</del> [2004]	Fireworks Devices . . . . .	3301.1.3, 3302.1”

267. The DOC Standard of Chapter 45, “Referenced Standards,” of the 2006 International Fire Code is amended to read as follows:

**“DOC**

U.S. Department of Commerce  
100 Bureau Drive, Stop 3460  
Gaithersburg, MD 20899

Standard reference number	Title	Referenced in code section number
16 CFR Part 1632— <del>2002</del> [1999]	Standard for the Flammability of Mattress and Mattress Pads (FF 4—72, Amended) . . . . .	805.1.2.1, 805.2.2.1, 805.3.2.1”

268. The DOL Standards of Chapter 45, “Referenced Standards,” of the 2006 International Fire Code are amended to read as follows:

**“DOL**

U.S. Department of Labor  
c/o Superintendent of Documents  
U.S. Government Printing Office  
Washington, DC 20402-9325

Standard reference number	Title	Referenced in code section number
29 CFR Part		

1910.1000— <u>2001</u> [ <del>1974</del> ] 29 CFR Part 1910.1200— <u>2001</u> [ <del>1999</del> ]	Air Contaminants . . . . .	1204.2.1, 2702.1
	Hazard Communication . . . . .	2702.1, 3303.6”

269. The DOTn Standards of Chapter 45, “Referenced Standards,” of the 2006

International Fire Code are amended to read as follows:

**“DOTn**

U.S. Department of Transportation  
Office of Hazardous Material Standards  
400 7<sup>th</sup> Street, Southwest  
Washington, DC 20590

Standard reference number	Title	Referenced in code section number
33 CFR Part 154 — <u>2001</u> [ <del>1998</del> ]	Facilities Transferring Oil or Hazardous Material in Bulk . . . . .	3406.8
33 CFR Part 155 — <u>2001</u> [ <del>1998</del> ]	Oil or Hazardous Material Pollution Prevention Regulations for Vessels . . . . .	3406.8
33 CFR Part 156 — <u>2001</u> [ <del>1998</del> ]	Oil and Hazardous Material Transfer Operations . . . . .	3406.8
49 CFR— <u>2001</u> [ <del>1998</del> ]	Transportation . . . . .	2605.4, 3302.1
49 CFR Part 1 — <u>2001</u> [ <del>1999</del> ]	Transportation . . . . .	3203.4.3, 3203.8
49 CFR Part 172 — <u>2001</u> [ <del>1999</del> ]	Hazardous Materials Tables, Special Provisions, Hazardous Materials Communications, Emergency Response Information and Training Requirements . . . . .	3304.6.5.2
49 CFR Part 173 — <u>2001</u> [ <del>1999</del> ]	Shippers – General Requirements for Shipments and Packagings . . . . .	3306.3
49 CFR Part 173.137 — <u>2001</u> [ <del>1990</del> ]	Shippers – General Requirements for Shipments and Packagings: Class 8 – Assignment of Packing Group . . . . .	3102.1
49 CFR Parts 100-178 — <u>2001</u> [ <del>1994</del> ]	Hazardous Materials Regulations . . . . .	3003.2, 3301.1, 3301.1.3, 3301.3, 3406.5.1.15”

270. The DOTy Standard of Chapter 45, “Referenced Standards,” of the 2006

International Fire Code is amended to read as follows:

**“DOTy**

U.S. Department of Treasury  
c/o Superintendent of Documents  
U.S. Government Printing Office  
Washington, DC 20402-9325

Standard reference number	Title	Referenced in code section number
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271. The NFPA Standards of Chapter 45, “Referenced Standards,” of the 2006 International Fire Code are amended to read as follows:

**“NFPA**

National Fire Protection Association  
Batterymarch Park  
Quincy, MA 02269

Standard reference number	Title	Referenced in code section number
10—02	Portable Fire Extinguishers . . . . .	Table 901.6.1, 906.2, 906.3, Table 906.3(1), Table 906.3(2), 2106.3
11—02	Low-, Medium-, High-expansion Foam . . . . .	904.7, 3404.2.9.1.2
11A—99	Medium- and High-expansion Foam Systems . . . . .	904.7, 3404.2.9.1.2
12—00	Carbon Dioxide Extinguishing Systems . . . . .	Table 901.6.1, 904.8, 904.11
12A—04	Halon 1301 Fire Extinguishing Systems . . . . .	Table 901.6.1, 904.9
13—02	Installation of Sprinkler Systems . . . . .	Table 704.1, 903.3.1.1, 903.3.2, 903.3.5.1.1, 903.3.5.2, 904.11, 905.3.4, [907.9] 2301.1, 2304.2, Table 2306.2, 2306.9, 2307.2, 2307.2.1, 2308.2.2, 2308.2.2.1, 2310.1, 2501.1, 2804.1, 2806.5.7, 3404.3.3.9, Table 3404.3.6.3(7), 3404.3.7.5.1, 3404.3.8.4
13D—02	Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes . . . . .	903.3.1.3, 903.5.1.1
13R—02	Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height . . . . .	903.3.1.2, 903.3.5.1.1, 903.3.5.1.2, 903.4,
14—03	Installation of Standpipe and Hose Systems . . . . .	905.2, 905.3.4, 905.4.2., 905.8
15—01	Water Spray Fixed Systems for Fire Protection . . . . .	3404.2.9.1.3
16—03	Installation of Foam-water Sprinkler and Foam-water Spray Systems . . . . .	904.7, 904.11
17—02	Dry Chemical Extinguishing Systems . . . . .	Table 901.6.1, 904.6, 904. 11
17A—02	Wet Chemical Extinguishing Systems . . . . .	Table 901.6.1, 904.5, 904.11
20—03	Installation of Stationary Pumps for Fire Protection . . . .	913.1, 913.2, 913.5.1, 913.6
22—03	Water Tanks for Private Fire Protection . . . . .	508.2.2
24—02	Installation of Private Fire Service Mains and their Appurtenances .	508.2.1, 1909.5
25—02	Inspection, Testing and Maintenance of Water-based Fire Protection Systems . . . . .	508.5.3, Table 901.6.1, 904.7.1, 912.6, 913.5
30—03	Flammable and Combustible Liquids Code . . . . .	3403.6.2, 3403.6.2.1, 3404.2.7, 3404. 2.7.1, 3404.2.7.2, 3404.2.7.3.6, 3404.2.7.4, 3404.2.7.6, 3404.2.7.7, 3404.2.7.8, 3404.2.7.9, 3404.2.9.2, 3404.2.9.3, 3404.2.9.5.1.1, 3404.2.9.5.1.2, 3404.2.9.5.1.3, 3404.2.9.5.1.4, 3404.2.9.5.1.5, 3404.2.9.5.2, 3404.2.9.6.4, 3404.2.10.2, 3404.2.11.4, 3404.2.11.5.2, 3404.2.12.1, 3404.3.1, 3404.3.6, 3404.3.7.2.3, 3404.3.7.5.1, 3404.3.8.4, 3406.8.3
30A—03	Code for Motor Fuel-dispensing Facilities and Repair Garages . . . . .	2201.4, 2201.5, 2201.6, 2206.6.3, 2210.1
30B—02	Manufacture and Storage of Aerosol Products . . . . .	2801.1, 2803.1, 2804.1, Table 2804.3.1, Table 2804.3.2, Table 2804.3.2.2, 2804.4.1, 2804.5.2, 2804.6, Table 2806.2, 2806.2.3, 2806.3.2, Table 2806.4, 2806.5.1, 2806.5.6, 2807.1
31—01	Installation of Oil-burning Equipment . . . . .	603.1.7, 603.3.1, 603.3.3,

32—00	Dry Cleaning Plants . . . . .	1207.1[ <del>1207.3</del> ]
33—03	Spray Application Using Flammable or Combustible Materials . . . . .	1504.3.2
34—03	Dipping and Coating Processes Using Flammable or Combustible Liquids . . . . .	1505.3, 1505.4.1.1
35—99	Manufacture of Organic Coatings . . . . .	2001.3, 2005.4
40—01	Storage and Handling of Cellulose Nitrate Film . . . . .	306.2
51—02	Design and Installation of Oxygen-fuel Gas Systems for Welding, Cutting, and Allied Processes . . . . .	2601.5, 2607.1, 2609.1
51A—01	Acetylene Cylinder Charging Plants . . . . .	2608.1
52—02	Compressed Natural Gas (CNG) Vehicular Fuel Systems Code. . . . .	3001.1
55—05	Standard for the Storage, Use and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationery Containers Cylinders and Tanks. . . . .	2209.2.1, 3201.1, 3501.1, 4001.1
57—02	Liquefied Natural Gas (LNG) Vehicular Fuel Systems Code. . . . .	3001.1
58—04	Liquefied Petroleum Gas Code . . . . .	<u>2201.7</u> , 3801.1, 3803.1, 3803.2.1, 3803.2.1.2 , 3803.2.1.7, 3803.2.2, 3804.1, 3804.3.1, 3804.4, 3806.2, 3806.3,3807.2,3808.1, 3808.2, 3809.11.2 ,3811.3
59A—01	Production, Storage and Handling of Liquefied Natural Gas (LNG) . .	3001.1, 3201.1
61—02	Prevention of Fires and Dust Explosions in Agricultural and Food Products Facilities . . . . .	Table 1304.1
69—02	Explosion Prevention Systems . . . . .	911.1, 911.3, Table 1304.1
72—02	National Fire Alarm Code . . . . .	509.1, Table 901.6.1, 903.4.1, [ <del>904.3.5</del> ] 907.2 907.2.1.1, 907.2.10, 907.2.10.4, 907.2.11.2, 907.2.11.3, 907.2.12.2.3, [ <del>907.2.12.3</del> ] 907.3 ,907.5, 907.6, 907.10.2, 907. 11 , 907.15, 907.17, 907.18, 907.20, 907.20.2,907.20.5
80—99	Fire Doors and Fire Windows . . . . .	703.2, 1008.1.3.3
85—04	Boiler and Combustion System Hazards Code . . . . .	Table 1304.1
86—03	Ovens and Furnaces . . . . .	2101.1
92B—05	Smoke Management Systems in Malls, Atria, and Large Spaces. . . . .	909.8
99—02	Health Care Facilities . . . . .	3006.4
101—03	Life Safety Code . . . . .	1025.6.2
110—02	Emergency and Standby Power Systems . . . . .	604.1, 604.3, 604.4, 913.5.2, 913.5.3
111—01	Stored Electrical Energy Emergency and Standby Power Systems . . . .	604.1, 604.3, 604.4
120—99	Coal Preparation Plants . . . . .	Table 1304.1
160—01	Flame Effects Before an Audience . . . . .	<u>308.1</u> , 308.3.6, <u>3801.1</u>
211—03	Chimneys, Fireplaces, Vents and Solid Fuel-burning Appliances . . . . .	603.2
230—03	Fire Protection of Storage . . . . .	2301.1 2308.4, 2310.1, 2501.1, 3404.3.3.9
241—00	Safeguarding Construction, Alteration, and Demolition Operations . . . . .	1401.1
260—03	Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture . . . . .	805.1.1.1, 805.2.1.1, 805.3.1.1
261—03	Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes . . . .	805.2.1.1, 805.3.1.1
265—02	Method of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Wall Coverings in Full Height Panels and Walls. . . . .	803.5.1, 803.5.1.1, 803.5.1.2
286—00	Standard Method of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth . . . . .	803.1, 803.1.2, 803.1.2.1, 803.5.1
303—00	Fire Protection Standard for Marinas and Boatyards. . . . .	905.37
385—00	Tank Vehicles for Flammable and Combustible Liquids . . . . .	3406.5.4.5, 3406.6, 3406.6.1
407—01	Aircraft Fuel Servicing . . . . .	1106.2, 1106.3

409—01	Aircraft Hangers . . . . .	914.8.2, 914.8.5
430—00	Storage of Liquid and Solid Oxidizers . . . . .	4004.1.4
484—02	Combustible Metals, Metal Powders, and Metal Dusts. . . . .	Table 1304.1
490—02	Storage of Ammonium Nitrate . . . . .	3301.1.5
495—01	Explosive Materials Code . . . . .	911.1, 911.4, 3301.1.1, 3301.1.5, 3302.1, 3304.2, 3304.6.2, 3304.6.3, 3304.7.1, 3305.1, 3306.1, 3306.5.2.1, 3306.5.2.3, 3307.1, 3307.9, 3307.11, 3307.15
498—01	Safe Havens and Interchange Lots for Vehicles Transporting Explosives . . .	3301.1.2
505—02	Powered Industrial Trucks, Including Type Designations, Areas of Use, Maintenance, and Operation . . . . .	2703.7.3
654—00	Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids . . . . .	Table 1304.1
655—01	Prevention of Sulfur Fires and Explosions . . . . .	Table 1304.1
664—02	Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities . . . . .	Table 1304.1, 1905.3
701—99	Methods of Fire Tests for Flame-propagation of Textiles and Films . . . . .	806.2, 807.1, 807.1.2, 807.2, 807.4.2.2, 1703.5
703—00	Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials . . . . .	803.4
704—01	Identification of the Hazards of Materials for Emergency Response . . . . .	606.7, 1802.1, 2404.2, 2703.2.2.1, 2703.2.2.2, 2703.5, 2703.10.2, 2705.1.10, 2705.2.1.1, 2705.4.4, 3203.4.1, 3404.2.3.2
750—03	Water Mist Fire Protection Systems . . . . .	Table 901.6.1
1122—02	Model Rocketry . . . . .	3301.1.4
1123—00	Fireworks Display . . . . .	3302.1, 3304.2, 3308.1, <u>3308.2.1, 3308.2.1.3</u> <u>[3308.2.2, 3308.5, 3308.6]</u>
1124—03	Manufacture, Transportation, Storage and Retail Sales of Fireworks and Pyrotechnic Articles . . . . .	3302.1, 3304.2, 3305.1, 3305.3, 3305.4, 3305.5
1125—01	Manufacture of Model Rocket and High Power Rocket Motors . . . . .	3301.1.4
1126—01	Use of Pyrotechnics Before a Proximate Audience . . . . .	3304.2, 3305.1, 3308.1, <u>3308.2.1, 3308.2.1.3</u> <u>[3308.2.2, 3308.4, 3308.5]</u>
1127—02	High Power Rocketry . . . . .	3301.1.4
2001—04	Clean Agent Fire Extinguishing Systems . . . . .	Table 901.6.1, 904.10”

272. Appendix A, “Board of Appeals,” of the 2006 International Fire Code is not adopted.

273. Appendices B, E, F, and G of the 2006 International Fire Code are adopted.

274. Appendix C, “Fire Hydrant Locations and Distributions,” of the 2006 International Fire Code is adopted with the following amendment:

A. Figure C103.1, “Fire Hydrants Available,” of Subsection C103, “Number of Fire Hydrants,” is amended to read as follows:

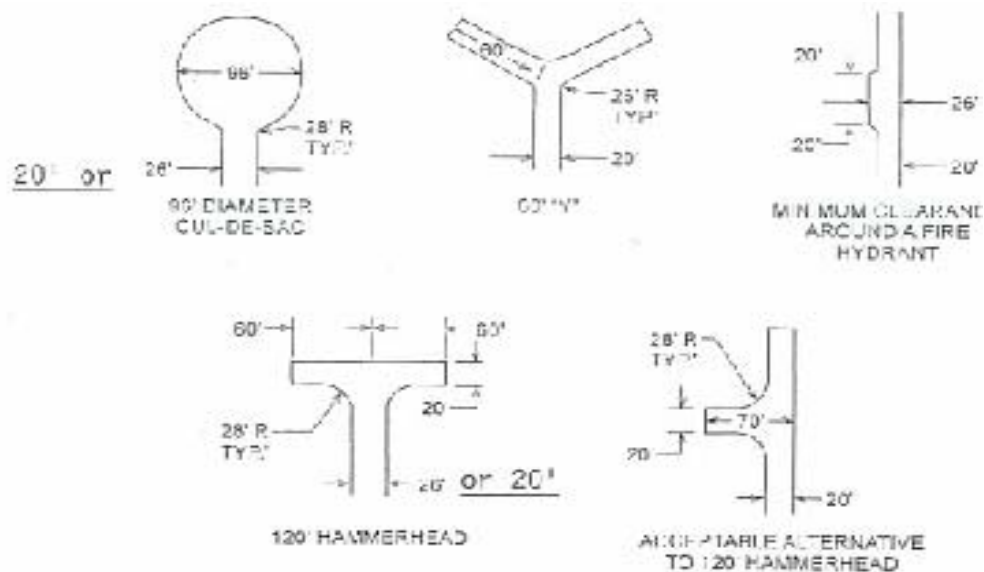
**“C103.1 Fire hydrants available.** The minimum number of fire hydrants available to a building shall not be less than that listed in Table C105.1. The number of fire hydrants available to a complex or subdivision shall not be less than that determined by spacing requirements listed in Table C501.1 when applied to fire apparatus access roads and perimeter public streets from which fire operations could be conducted. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.”

275. Appendix D, “Fire Apparatus Access Roads,” of the 2006 International Fire Code is adopted with the following amendments:

A. Figure D103.1, “Dead-End Fire Apparatus Access Road Turnaround,” of Subsection D103.1, “Access Road Width With A Hydrant,” of Section D103, “Minimum Specifications,” is amended to read as follows:

**Figure D103.1**

**DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND**



For S1: 1 foot = 304.8mm

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 Section I104, ‘Limited Access Gates,’ of Appendix I. [~~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.]”~~

D. Subsection D103.6, “Signs,” of Section D103, “Minimum Specifications,” is amended to read as follows:

**~~“D103.6 Signs.~~** See Section 503.3 [~~Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2~~].

~~[D103.6.1 Roads 20 to 26 feet in width. Fire 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.]”~~

E. Figure D103.6, “Fire Lane Signs,” of Subsection D103.6, “Signs,” of Section D103, “Minimum Specifications,” is deleted.

F. Subsection D104.1, “Buildings Exceeding Three Stories or 30 Feet in Height,” of Section D104, “Commercial and Industrial Developments,” is deleted.

G. Subsection D104.2, “Buildings Exceeding 62,000 Square Feet in Area,” of Section D104, “Commercial and Industrial Developments,” is deleted.

H. Section D105, “Aerial Fire Apparatus Access Roads,” is deleted.

I. Section D107, “One- or Two-Family Residential Developments,” is deleted.

276. The 2006 International Fire Code is amended by adding a new Appendix H, “Unit Conversion Tables,” to read as follows:

**“APPENDIX H  
UNIT CONVERSION TABLES  
SI SYMBOLS AND PREFIXES**

<b>BASE UNITS</b>		
<b>Quantity</b>	<b>Unit</b>	<b>Symbol</b>
Length	Meter	m
Mass	Kilogram	kg
Time	Second	s
Electric current	Ampere	A
Thermodynamic temperature	Kelvin	K
Amount of substance	Mole	mol
Luminous intensity	Candela	cd

SI SUPPLEMENTARY UNITS		
Quantity	Unit	Symbol
Plane angle	Radian	rad
Solid angle	Steradian	sr
SI PREFIXES		
Multiplication Factor	Prefix	Symbol
1 000 000 000 000 000 000 = $10^{18}$	exa	E
1 000 000 000 000 000 = $10^{15}$	peta	P
1 000 000 000 000 = $10^{12}$	teta	T
1 000 000 000 = $10^9$	giga	G
1 000 000 = $10^6$	mega	M
1 000 = $10^3$	kilo	k
100 = $10^2$	hecto	h
10 = $10^1$	deka	da
0.1 = $10^{-1}$	deci	d
0.01 = $10^{-2}$	centi	c
0.001 = $10^{-3}$	milli	m
0.000 001 = $10^{-6}$	micro	$\mu$
0.000 000 001 = $10^{-9}$	nano	n
0.000 000 000 001 = $10^{-12}$	pico	p
0.000 000 000 000 001 = $10^{-15}$	femto	f
0.000 000 000 000 000 001 = $10^{-18}$	atto	a

SI DERIVED UNIT WITH SPECIAL NAMES			
Quantity	Unit	Symbol	Formula
Frequency (of a periodic phenomenon)	hertz	Hz	1/s
Force	newton	N	$\text{Kg} \cdot \text{m/s}^2$
Pressure, stress	pascal	Pa	$\text{N/m}^2$
Energy, work, quantity of heat	joule	J	$\text{N} \cdot \text{m}$
Power, radiant flux	watt	W	J/s
Quantity of electricity, electric charge	coulomb	C	A·s
Electric potential, potential difference electromotive force	volt	V	W/A
Capacitance	farad	F	C/V
Electric resistance	ohm	$\Omega$	V/A
Conductance	siemens	S	A/V
Magnetic flux	weber	Wb	V·s
Magnetic flux density	tesla	T	$\text{Wb/m}^2$
Inductance	henry	H	Wb/A
Luminous flux	lumen	lm	$\text{cd} \cdot \text{sr}$
Illuminance	lux	lx	$\text{lm/m}^2$
Activity (of radionuclides)	becquerel	Bq	1/s
Absorbed dose	gray	Gy	J/kg

CONVERSION FACTORS		
To convert	to	multiply by
<b>LENGTH</b>		
1 mile (U.S. statute)	km	1.609 344
1 yd	m	0.9144
1 ft	m	0.3048
	mm	304.8
1 in	mm	25.4
<b>AREA</b>		
1 mile <sup>2</sup> (U.S. statute)	km <sup>2</sup>	2.589 998
1 acre (U.S. survey)	ha	0.404 6873
	m <sup>2</sup>	4046.873
1 yd <sup>2</sup>	m <sup>2</sup>	0.836 1274
1 ft <sup>2</sup>	m <sup>2</sup>	0.092 903 04
1 in <sup>2</sup>	mm <sup>2</sup>	645.16
<b>VOLUME, MODULUS OF SECTION</b>		
1 acre ft	m <sup>3</sup>	1233.489
1 yd <sup>3</sup>	m <sup>3</sup>	0.764 5549
100 board ft	m <sup>3</sup>	0.235 9737
1 ft <sup>3</sup>	m <sup>3</sup>	0.028 316 85
	L(dm <sup>3</sup> )	28.3168
1 in <sup>3</sup>	mm <sup>3</sup>	16 387.06
	mL (cm <sup>3</sup> )	16.3871
1 barrel (42 U.S. gallons)	m <sup>3</sup>	0.158 9873
<b>(FLUID) CAPACITY</b>		
1 gal (U.S. liquid)*	L**	3.785 412
1 qt (U.S. liquid)	mL	946.3529
1 pt (U.S. liquid)	mL	473.1765
1 fl oz (U.S.)	mL	29.5735
1 gal (U.S. liquid)	m <sup>3</sup>	0.003 785 412
*1 gal (UK) approx 1.2 gal (U.S.)		
**1 liter approx 0.001 cubic meters		
<b>SECOND MOMENT OF AREA</b>		
1 in <sup>4</sup>	mm <sup>4</sup>	416 231 4
	m <sup>4</sup>	416 231 4 X 10 <sup>-7</sup>
<b>PLANE ANGLE</b>		
1° (degree)	rad	0.017 453 29
	mrاد	17.453 29
1' (minute)	urاد	290.8882
1" (second)	urاد	4.848 137

VELOCITY, SPEED		
1 ft/s	m/s	0.3048
1 mile/h	km/h	1.609 344
	m/s	0.477 04
VOLUME RATE OF FLOW		
1 ft <sup>3</sup> /s	m <sup>3</sup> /s	0.028 316 85
1 ft <sup>3</sup> /min	L/s	0.471 9474
1 gal/min	L/s	0.063 0902
1 gal/min	m <sup>3</sup> /min	0.0038
1 gal/h	mL/s	1.051 50
1 million gal/d	L/s	43.8126
1 acre ft/s	m <sup>3</sup> /s	1233.49
TEMPERATURE INTERVAL		
1°F	°C or K	0.555 556
		5/9°C = 5/9K
EQUIVALENT TEMPERATURE (t <sub>C</sub> = T <sub>K</sub> -273.15)		
t <sub>F</sub>	T <sub>C</sub>	t <sub>F</sub> =9/5t <sub>C</sub> +32
MASS		
1 ton (short <sup>***</sup> )	metric ton	0.907 185
	kg	907.1847
1 lb	kg	0.453 5924
1 oz	g	28.349 52
***1 long ton (2,240 lb)	Kg	1016.047
MASS PER UNIT AREA		
1 lb/ft <sup>2</sup>	kg/m <sup>2</sup>	4.882 428
1 oz/yd <sup>2</sup>	g/m <sup>2</sup>	33.905 75
1 oz/ft <sup>2</sup>	g/m <sup>2</sup>	305.1517
DENSITY (MASS PER UNIT VOLUME)		
1 lb/ft <sup>3</sup>	kg/m <sup>3</sup>	16.01846
1 lb/yd <sup>3</sup>	kg/m <sup>3</sup>	0.593 2764
1 ton/yd <sup>3</sup>	t/m <sup>3</sup>	1.186 553
FORCE		
1 tonf (ton-force)	kN	8.896 44
1 kip (1,000 lbf)	kN	4.448 22
1 lbf (pound-force)	N	4.448 22
MOMENT OF FORCE, TORQUE		
1 lbf·ft	N·m	1.355 818
1 lbf·in	N·m	0.112 9848
1 tonf·ft	kN·m	2.711 64
1 kip·ft	kN·m	1.355 82
FORCE PER UNIT LENGTH		
1 lbf/ft	N/m	14.5939
1 lbf/in	N/m	175.1268
1 tonf/ft	kN/m	29.1878

<b>PRESSURE, STRESS, MODULUS OF ELASTICITY (FORCE PER UNIT AREA)</b> <b>(1Pa = 1 N/m<sup>2</sup>)</b>		
1 tonf/in <sup>2</sup>	MPa	13.7895
1 tonf/ft <sup>2</sup>	kPa	95.7605
1 kip/in <sup>2</sup>	MPa	6.894 757
1 lbf/in <sup>2</sup>	kPa	6.894 757
1 lbf/ft <sup>2</sup>	Pa	47.8803
Atmosphere	kPa	101.3250
1 inch mercury	kPa	3.376 85
1 foot (water column at 32°F)	kPa	2.988 98
<b>WORK, ENERGY, HEAT (1J = 1N·m = 1W·s)</b>		
1 kWh (550 ft·lbf/s)	MJ	3.6
1 Btu (Int. Table)	kJ	1.055 056
	J	1055.056
1 ft·lbf	J	1.355 818
<b>COEFFICIENT OF HEAT TRANSFER</b>		
1 Btu/(ft <sup>2</sup> ·h·°F)	W/(m <sup>2</sup> ·K)	5.678 263
<b>THERMAL CONDUCTIVITY</b>		
1 Btu/(ft·h·°F)	W/(m·K)	1.730 735
<b>ILLUMINANCE</b>		
1 lm/ft <sup>2</sup> (footcandle)	lx (lux)	10.763 91
<b>LUMINANCE</b>		
1 cd/ft <sup>2</sup>	cd/m <sup>2</sup>	10.7639
1 foot lambert	cd/m <sup>2</sup>	3.426 259
1 lambert	kcd/m <sup>2</sup>	3.183 099"

277. The 2006 International Fire Code is amended by adding a new Appendix I, "Miscellaneous Dallas Fire-Rescue Department Standards," to read as follows:

**“APPENDIX I**  
**MISCELLANEOUS DALLAS FIRE-RESCUE DEPARTMENT STANDARDS**

**SECTION I101**  
**GENERAL**

**I101.1 General.** The following standards of the Dallas Fire-Rescue Department are codified as a supplement to the *Dallas Fire Code*.

**SECTION I102**  
**SPECIFICATIONS FOR SECURING UNSECURED VACANT STRUCTURES**

**I102.1 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*.

**I102.2 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.

**I102.3 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 I102.4.

**I102.4 Specifications and materials.** Specifications and materials are outlined in this section (see attached diagrams and specifications).

**I102.4.1 Specifications and materials for securing windows.** The following specifications and materials are to be used in securing windows.

½-inch (12.7-mm) CDX plywood cut to provide an overlap of 2 inches (50.8 mm) on all sides secured on exterior side.

8 penny cement coated, hot dipped zinc or galvanized nails.<sup>a</sup>

2 inch (50.8 mm) steel washer.

¼-inch (6.4 mm) steel plate 6 inch square (0.00387 m<sup>2</sup>) for use as a washer.

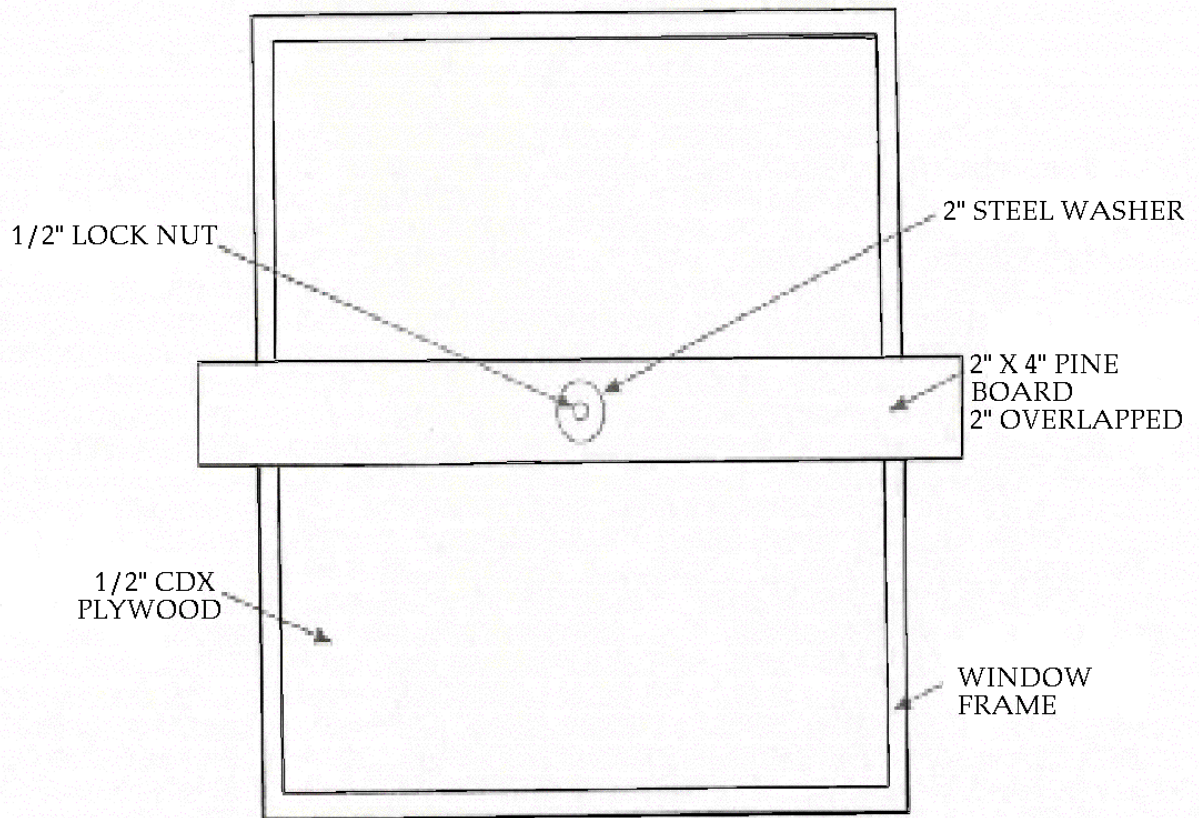
2-inch X 4-inch (50 mm by 101.6 mm) pine board cut to provide an overlap of 2 inches (50.8 mm) on both sides.<sup>b</sup>

½-inch (12.7 mm) carriage bolt and ½-inch (12.7 mm) lock nut.

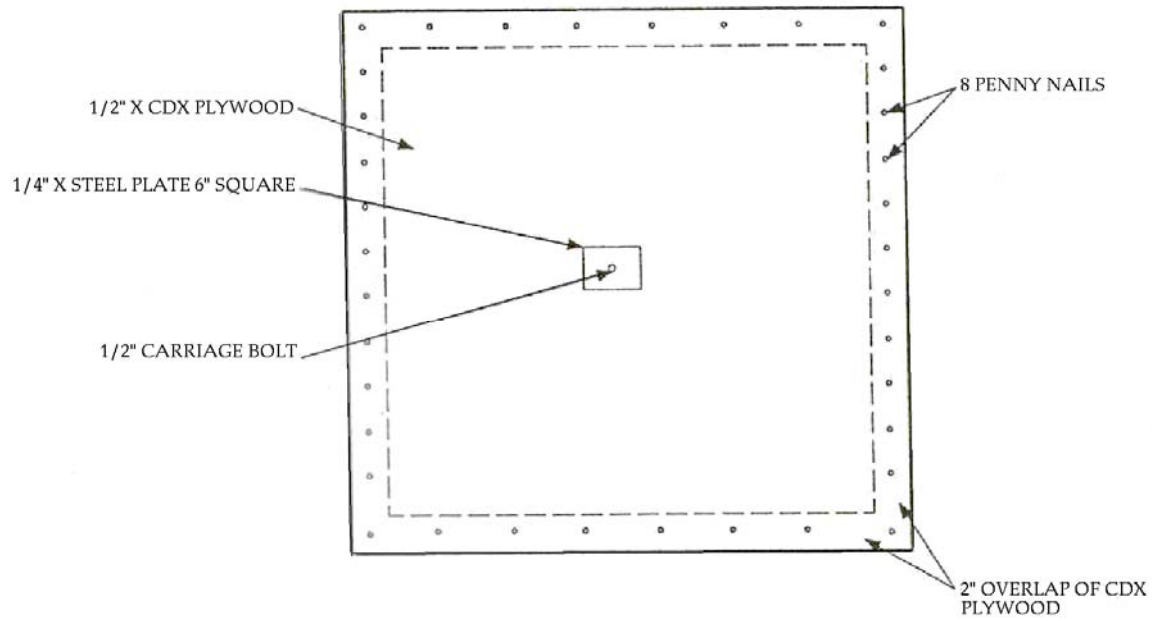
- a. If applicable, 1½-inch (38.1 mm) masonry nails or # 8 1¼-inch (31.8 mm) sheet metal screws shall be used. All nails and screws on all installations may not exceed a maximum spacing of 12 inches (304.8 mm).
- b. 2-inch X 4-inch (50.8 mm by 101.6 mm) pine board assembly should be centered if possible. Window shall have to be raised if not broken.

Casement, other window types which open outward, and picture windows with glass intact are exempt from the 2-inch X 4-inch (50 mm by 101.6 mm) pine board assembly requirement. However, they shall still be boarded from the exterior. Nails or screws may not exceed a maximum spacing of 6 inches (152.4 mm).

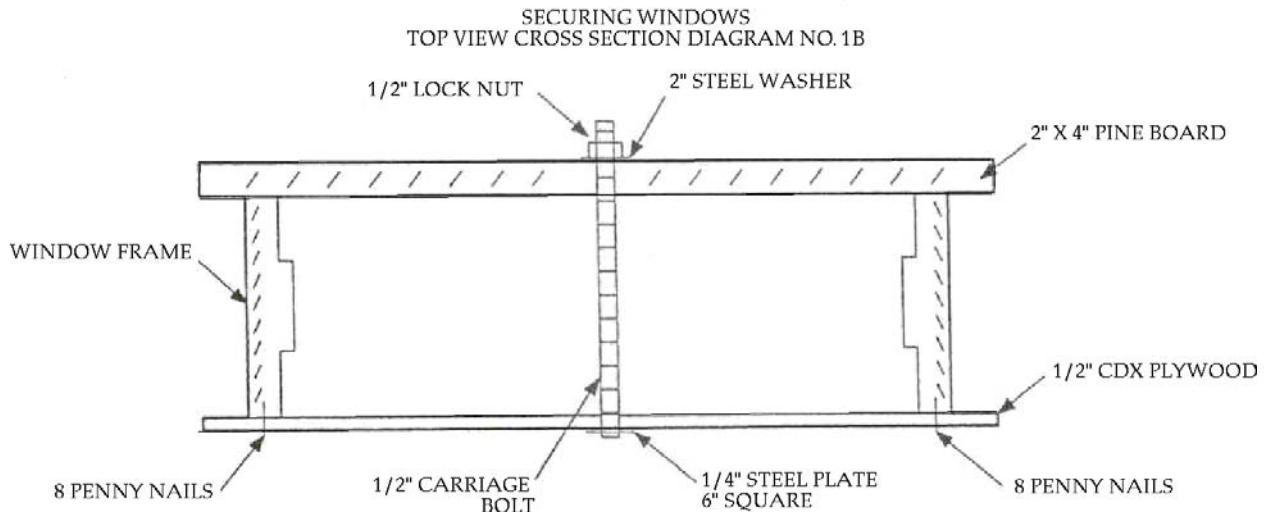
SECURING WINDOWS  
INTERIOR VIEW DIAGRAM NO.1



EXTERIOR VIEW DIAGRAM NO. 1A



Dotted line denotes hidden view



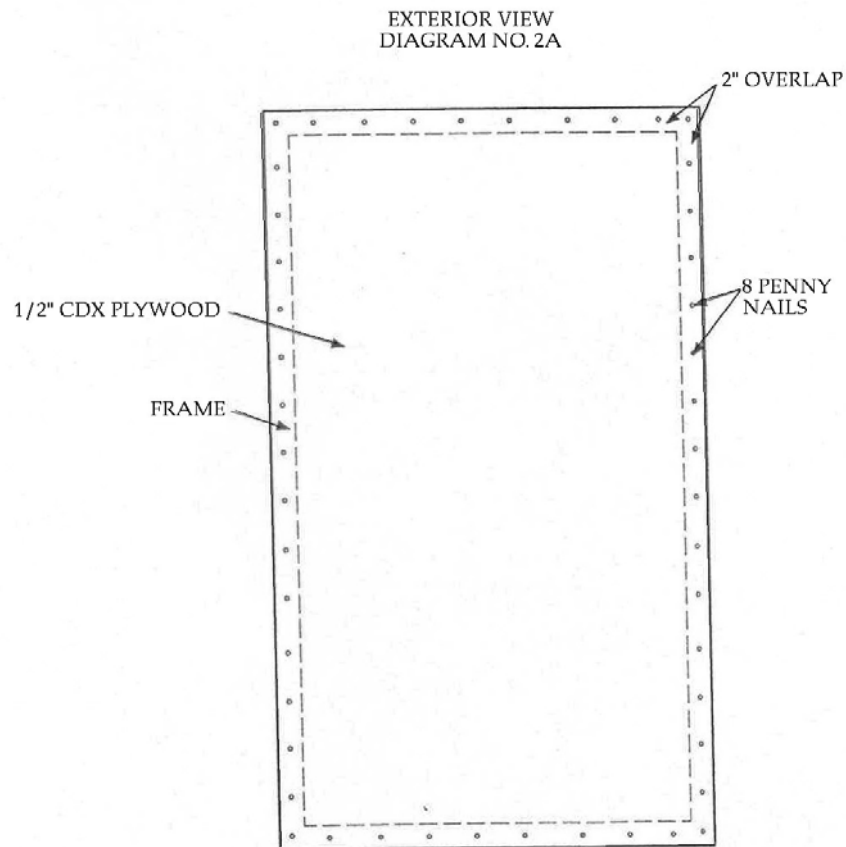
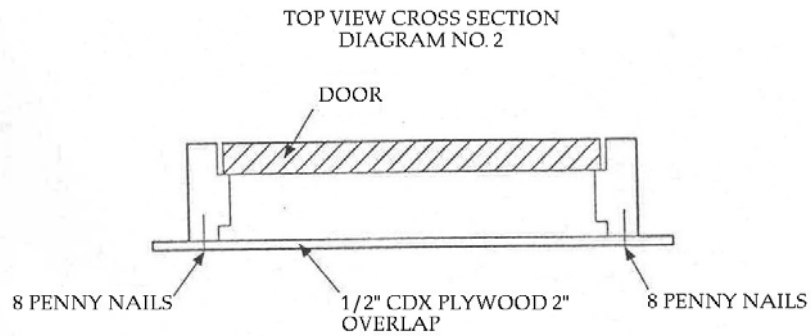
**I102.4.2 Specifications and materials for securing doors.** The following specifications and materials are to be used in securing doors.

1/2-inch (12.7 mm) CDX plywood cut to provide an overlap of 2 inches (50.8 mm) on all sides.

8 penny cement coated, hot dipped zinc or galvanized nails.<sup>a</sup>

All doors are to be secured on the exterior side.

- a. If applicable 1 1/2-inch (38.1 mm) masonry nails or # 8 1 1/4-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).



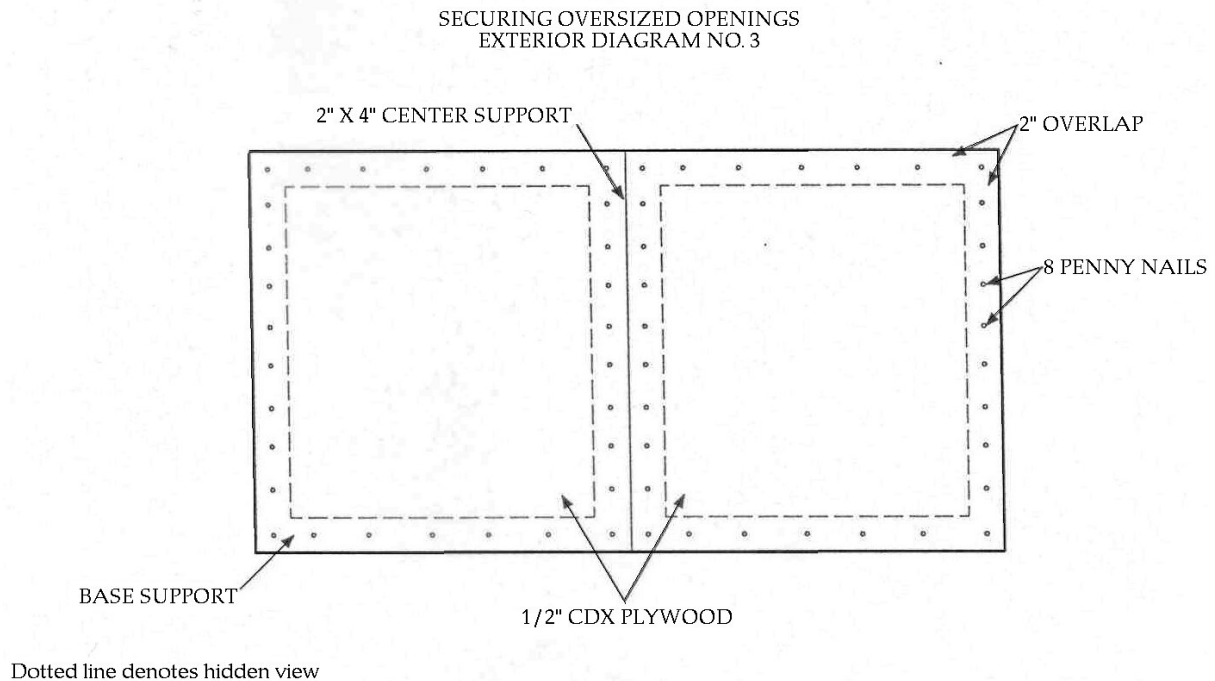
**I102.4.3 Specifications and materials for securing oversized openings.** The following specifications and materials are to be used for securing oversized openings.

1/2-inch (12.7 mm) CDX plywood cut to provide an overlap of 2 inches (50.8 mm) on all sides.

2-inch X 4-inch (50.8 mm by 101.6 mm) pine board center support.<sup>a</sup>

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, 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 all installations may not exceed a maximum spacing of 6 inches (152.4 mm).



**I102.4.4 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:

6-foot (1828.8 mm) chain link fence posts are to be anchored in concrete or a comparable approved material.

Gates of like materials.

Padlocks.

Three strands of barb wire or razor wire along top of fence and gate.

One strand of 7-gauge spring wire tightly woven and secured along the base of the fence.

Fence shall secure the perimeter of the structure(s) to prevent unauthorized entry.

### **SECTION I103**

#### **GENERAL FIRE SAFETY REQUIREMENTS FOR HIGH-RISE BUILDINGS**

**I103.1 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.

**I103.2 Fire safety personnel assignments.** The following fire safety personnel are required in high-rise buildings:

**I103.2.1 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.

**I103.2.2 Fire warden.** A fire warden shall be designated for each floor.

**I103.2.2.1 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.

**I103.2.2.2 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.

**I103.2.3 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.

**I103.3 Fire safety plan.** The following items shall be included in a high-rise building's fire safety plan:

**I103.3.1 Emergency phone numbers.** The following phone numbers are required:

1. Fire/ambulance/police: 9-1-1.
2. Management and fire safety director.
3. Security.

**I103.3.2 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.

**I103.3.3 Fire alarm system.** A high-rise building safety plan shall:

1. Explain how the alarm system is activated:
  - 1.1. Manual pull stations;
  - 1.2. Smoke detectors/heat detectors; or
  - 1.3. Water flow/tamper alarms on the sprinkler system.
2. Explain what is activated in an alarm condition and give examples:
  - 2.1. Horns or bells, either throughout the building, on the fire floor, two floors above, one floor below, or on the fire floor only;
  - 2.2. Elevators recalled to the ground floor;
  - 2.3. Heating, ventilating, and air-conditioning systems (HVAC) on the fire floor turned off. Exhaust fans are activated to remove smoke in the building.

2.4. Pressurized stairwells, if applicable.

2.5 Automatically unlocks stairwell doors from the stairwell side to permit re-entry onto other floors if smoke is encountered in the stairwell.

If stairwell re-entry is only available on every fifth floor, signs shall be posted indicating reentry points.

**I103.3.4 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.

**I103.4 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.

**I103.5 General requirements for high-rise buildings.** High-rise buildings shall meet the following requirements.

**I103.5.1 Elevator warning signs.** The operator of the premises shall post and maintain in each elevator lobby, on all floors, a sign which has the words IN FIRE EMERGENCY, DO NOT USE ELEVATOR. USE EXIT STAIRS. Existing approved signs that read ELEVATORS MAY NOT BE USED IN CASE OF FIRE – USE STAIRWELLS WHICH ARE MARKED AS EXITS installed prior to the adoption of this code shall be permitted. Sign shall be marked:

1. In letters at least ½ inch (12.7 mm) high and on a contrasting background.
2. With a floor evacuation diagram oriented from each posted location showing the location of at least two of the nearest stairs.

**I103.5.2 Information sign.** The operator of the premises shall post and maintain at the main elevator lobby a sign, which has the words, ‘Fire Emergency Plan Available for Review from the Management Office’ of letters at least ½ inch (12.7 mm) high and on a contrasting background.

## **SECTION I104 LIMITED ACCESS GATES**

**I104.1 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.

**I104.1.1 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.

**I104.1.2 Building permit required.** A building permit is required to install fencing over 6 feet (1828.8 mm) high.

**I104.1.3 Electrical permit required.** An electrical permit is required for all electrical work.

**I104.1.4 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.

**I104.2 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.

**I104.3 Weatherproof box required.** The manual release device as required in Item 4 of Section I104.2 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 1½ 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.

**I104.4 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.

**I104.5 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.

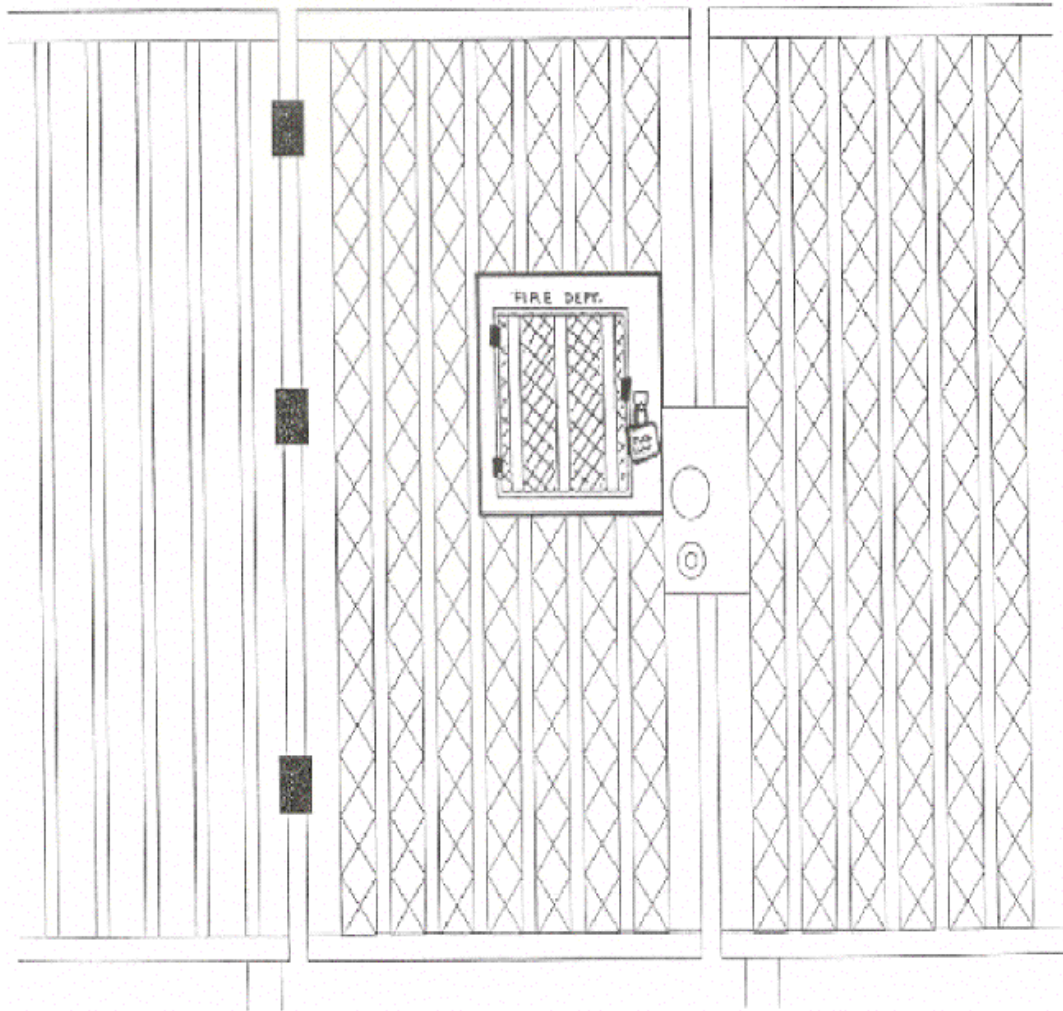
**I104.6 Performance test required.**

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.

**I104.7 Illegal secondary obstructions to limited access gates.**

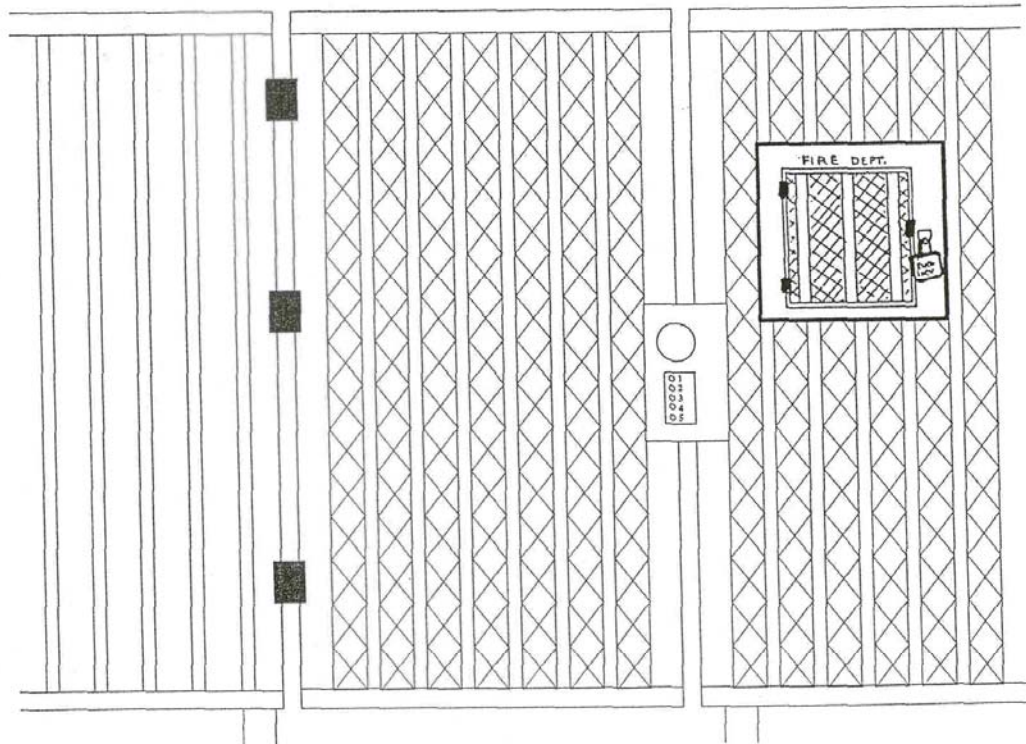
1. Barrier arms in front of access gates are not allowed.
2. Magnetic locking devices interconnected to Dallas Fire-Rescue Department radio receivers on limited access gates are prohibited.

PEDESTRIAN WALKWAY SECURITY GATES



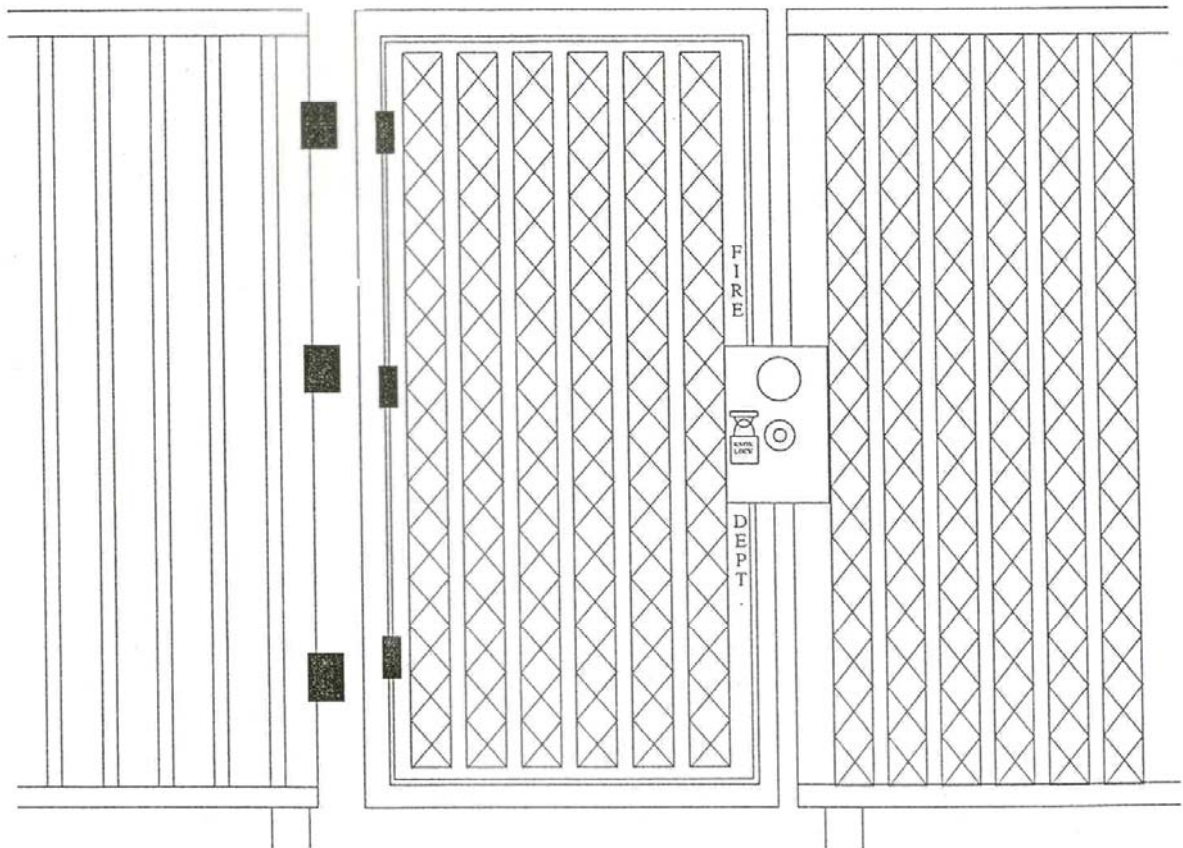
KEY ACCESS GATE  
FREE EXIT

PEDESTRIAN WALKWAY SECURITY GATES



CODE ACCESS GATE  
FREE EXIT

PEDESTRIAN WALKWAY SECURITY GATES



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278. All chapters of the 2006 International Fire Code adopted by this ordinance are subchapters of CHAPTER 16 of the Dallas City Code, as amended.

279. All references in the 2006 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 2006 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 immediately from and after its passage and publication, in accordance with the Charter of the City of Dallas, and it is accordingly so ordained.

APPROVED AS TO FORM:

THOMAS P. PERKINS, JR., City Attorney

By \_\_\_\_\_  
Assistant City Attorney

Passed \_\_\_\_\_