

An Ordinance of the City of Plano, Texas, repealing in its entirety Section 8-17, Adoption of International Fire Code, of Article II, Fire Code, of Chapter 8, Fire Prevention and Protection, of the Code of Ordinances of the City of Plano; adopting the 2024 Edition of the International Fire Code, with certain revised additions, deletions, and amendments, as the Fire Code of the City of Plano; and providing a repealer clause, a severability clause, a savings clause, and an effective date.

WHEREAS, on November 26, 2018, the City Council enacted Ordinance No. 2018-11-19 adopting the 2018 Edition of the International Fire Code with certain additions, deletions and amendments as the Fire Code of the City of Plano; and

WHEREAS, on July 27, 2020, the City Council enacted Ordinance No. 2020-7-3 adopting staff recommended amendments of sections of Article II of Chapter 8, Fire Prevention and Protection, of the Code of Ordinances of the City of Plano; and

WHEREAS, on January 24, 2022, the City Council enacted Ordinance No. 2022-1-20, adopting the 2021 Edition of the International Fire Code with certain additions, deletions, and amendments as the Fire Code of the City of Plano; and

WHEREAS, upon recommendation of Plano Fire-Rescue and upon full review and consideration of all matters related thereto, the City Council is of the opinion that Section 8-17, Adoption of International Fire Code, of Article II, Fire Code, of Chapter 8, Fire Prevention and Protection, of the Code of Ordinances of the City of Plano should be repealed and the 2024 Edition of the International Fire Code, along with the revised local amendments thereto, should be adopted as the Fire Code for the City of Plano.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF PLANO, TEXAS, THAT:

Section I. Section 8-17, Adoption of International Fire Code, of Article II, Fire Code, of Chapter 8, Fire Prevention and Protection, of the Code of Ordinances of the City of Plano is hereby repealed in its entirety.

Section II. The 2024 Edition of the International Fire Code with certain revised additions, deletions, and amendments is hereby adopted as the Fire Code of the City of Plano and shall read in its entirety as follows:

“Sec. 8-17. – Adoption of International Fire Code.

The 2024 Edition of the International Fire Code, including Appendices B, E, F, and L, a publication of the International Code Council, is hereby adopted and designated as the Fire Code of the City, to the same extent as if such code were copied verbatim in this

section, subject to the deletions, additions and amendments prescribed in this section. A copy of the 2024 Edition of the International Fire Code is on file in the office of the City Secretary.

Section 101 Scope and General Requirements

Section 101.1 Title. These regulations shall be known as the Fire Code of the City of Plano, hereinafter referred to as “this code.”

Section 102 Applicability

Sec. 102.1 amend #3 to read as follows:

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

Sec. 103 Code Compliance Agency

Sec. 103.1 is amended to read as follows:

Sec. 103.1 Creation of agency. Plano Fire-Rescue’s, Fire Prevention Section is hereby created and the official in charge thereof shall be known as the *fire code official*. The function of the agency shall be the implementation, administration, and enforcement of the provisions of this code.

Sec. 104 Duties and Powers of the Fire Code Official.

Sec. 104 add new section 104.12 to read as follows:

Sec. 104.12 Fire prevention bureau personnel and police. The chief and members of the fire prevention bureau shall have the power to issue citations for violations of this code. When requested to do so by the fire chief, the chief of police is authorized to assign such available police officers as necessary to assist the fire department in enforcing the provisions of this code.

Section 108 Fees

Sec. 108 is amended by deleting Section 108.3

Section 113 Violations

Sec. 113.3, Notice of violation, is deleted in its entirety.

Subsection 113.3.1, Service, is deleted in its entirety.

Subsection 113.3.2, Compliance with orders and notices, is deleted in its entirety.

Subsection 113.3.3, Prosecution of violations, is deleted in its entirety.

Sec. 113.4, Violations Penalties, is deleted in its entirety.

Sec. 202 General Definitions

Sec. 202; the following are amended to read as follows:

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

HIGH-PILED COMBUSTIBLE STORAGE.

Sec. 202; add a second paragraph to the definition of “High-Piled Combustible Storage” to read as follows:

Any building exceeding 6,000 sq. ft. that has a clear height in excess of 12 feet, shall be considered to be high-piled storage and shall comply with the provisions of this section. When a specific product cannot be identified, a fire protection system shall be installed as for Class IV commodities, to the maximum pile height.

HIGH-RISE BUILDING. A building having floors used for human occupancy located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access.

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification, and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement, and other such minor repairs.

STANDPIPES, TYPES OF. 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 must be supervised as specified in Section 905.9.

Sec. 202 is amended by the addition of the following:

SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

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

Sec. 203.2.3 is amended to read as follows:

Sec. 203.2.3 Associated with Group E occupancies. A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy, except when applying the assembly requirements of Chapters 10 and 11.

Section 307 Open Burning, Recreational Fires and Portable Outdoor Fireplaces.

Sec. 307.1.1 is amended to read as follows:

Sec. 307.1.1 Prohibited Open Burning. Open burning shall be prohibited within the City of Plano.

Sec. 308 Open Flames.

Section 308.1.6; Exception #3 is amended to read as follows:

Exception:

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

Sec. 308 add new section 308.1.11 to read as follows:

Sec. 308.1.11 Open-flame Cooking Devices. Open flame cooking devices shall comply with Section 4104.

Section 311 Vacant Premises

Section 311.5 is amended to read as follows:

Sec. 311.5 Placards. The Fire Code Official is authorized to require marking of any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 115 of this code relating to structural or interior hazards, shall be marked as required by Section 311.5.1 through 311.5.5.

Section 314 Indoor Displays

Sec. 314.4 is amended by adding a section 5 to read as follows:

5. Electric vehicles shall not be charged inside buildings, other than where approved in parking garages.

Chapter 3 General Requirements is amended by adding section 323 and section 323.1 through 323.3 to read as follows:

Section 323 Electric Vehicles (EV)

Sec. 323.1 Electric Vehicle Charging Stations. Electric vehicle (EV) charging stations shall not be located inside buildings, except where approved for parking garage locations as per the National Electrical Code.

323.1.1 Charging Stations Inside Parking Garage. EV charging stations located in parking garages shall be located at grade level along the exterior perimeter walls and shall be within 150 feet from a fire apparatus access roadway or shall be located on the top level of the garage with no roof above.

323.1.2 Charging Stations Inside R-3 and R-4 Occupancies. Approved charging stations in a private garage shall have a listed heat alarm installed in the garage and interconnected to the smoke alarms inside the dwelling.

323.2 Disconnect. Locations containing EV charging stations shall be provided with a clearly identified and readily accessible emergency disconnect installed in an approved location.

The emergency disconnects for EV charging stations shall be located within 100 feet (30,480 mm) of, but not less than 20 feet (6'096 mm) from the charging stations, unless otherwise approved by the fire code official.

323.2.1 Height. The height of the emergency disconnect switch shall be not less than 42 inches (1067 mm) and not more than 48 inches (1219 mm) measured vertically, from the floor level to the activating button.

323.2.2 Emergency Disconnect Sign. Emergency disconnect devices shall be distinctly labeled as: "EMERGENCY ELECTRIC VEHICLE CHARGER DISCONNECT." Signs shall be permanently affixed to the building or structure in an approved manner and placed in an approved location, and shall consist of the following:

1. White reflective background with red letters.
2. Weather-resistant durable material; and
3. Lettering not less than 2 inches (51 mm) high.

323.3 Damaged Electric Vehicle Batteries. Damaged EV batteries shall not be stored inside any building.

Section 401 General

Sec. 401.3; add Section 401.3.4 to read as follows:

Sec. 401.3.4 False Alarms and Nuisance Alarms. False alarms, nuisance alarms, and unwanted alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

Section 501 General

Sec. 501.4 is amended to read as follows:

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

Section 503 Fire Apparatus Access Roads.

Sec. 503.1.1 is amended by the addition of the following to the first paragraph:

Sec. 503.1.1 Building and Facilities. The 150 feet (150') shall be measured along a ten foot (10') wide unobstructed pathway around the external walls of the structure. The grade shall not exceed six (6) percent. The provision of this section notwithstanding, fire lanes may be required to be located within thirty feet (30') of a building if deemed to be reasonably necessary by the Fire Chief to enable proper protection of the building. A five (5) foot wide level pathway shall be provided unobstructed through all barriers. A continuous row of parking between the fire lane and the structure shall be considered a barrier.

Fire lane and access easements shall be provided to serve all buildings through parking areas, to service entrances of buildings, loading areas and trash collection areas, and other areas deemed necessary to be available to fire and emergency vehicles. The Fire Chief is authorized to designate additional requirements for fire lanes where the same is reasonably necessary so as to provide access for fire and rescue personnel.

Fire lanes provided during the platting process shall be so indicated on the plat as an easement. Where fire lanes are provided and a plat is not required, the limits of the fire lane shall be shown on a site plan and placed on permanent file with the Fire Marshal and City Planning Department.

No owner or person in charge of any premises served by a fire lane or access easement shall abandon, restrict or close any fire lane or easement without first securing from the City of Plano approval of an amended plat or other acceptable legal instrument showing the removal of the fire lane.

Sec. 503.1.2 is amended by the addition of the following to the first paragraph:

Sec. 503.1.2 Additional Access. All structures and subdivisions shall provide two points of access. The two points of access shall be a minimum of 140 feet apart. The maximum block length shall be 1200' and the maximum cul-de-sac length shall not exceed 600' in length as measured from the centerline of the intersection, street to the center point of the radius.

Sec. 503.2.1 is amended to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 24 feet (7,315 mm), except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 14 feet (4,267 mm).

Any such fire lane easement shall either connect both ends to a dedicated street or be provided with a turnaround having a minimum outer radius of 50 feet. If two or more interconnecting lanes are provided, interior radius for that connection shall be required in accordance with the following:

For 90 degree or greater turns only

24' fire lane – minimum radius 20'

30' fire lane – minimum radius 10'

For turns tighter than 90 degrees, American Association of State and Highway Transportation Officials (AASHTO) Geometric Design of Highways and Streets shall be utilized.

Sec 503.2.2 is amended to read as follows:

Sec 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.

Sec. 503.2.3 Surface is amended to read as follows:

Sec. 503.2.3 Surface. Fire lanes shall be constructed of an asphalt or concrete surface capable of supporting the imposed loads of 85,000 pounds for fire apparatus and meeting the requirements of the City of Plano parking lot standards. Those portions of the fire lane within sixty feet (60') of the structure to be protected shall be constructed with 6-inch thick, 3000 psi concrete or 5-inch thick, 3600 psi concrete reinforced with No. 3 bars spaced 24 inches on centers both ways and with sub-grade to a density not less than 95 percent as determined by TSDHPT Test Method Tex-113. Portions of the fire lane constructed of asphalt shall be ninety-five (95) percent compaction with a 6-inch asphalt stabilized base and 2-inch type D hot mix asphalt concrete. (State Highway specification

number 292.) Whenever forty percent (40%) of existing, non-conforming fire lanes are replaced within a twelve-month period, the entire fire lane shall be replaced according to current standards.

All fire lanes shall be maintained and kept in a good state of repair at all times by the owner and the City of Plano shall not be responsible for the maintenance thereof. It shall further be the responsibility of the owner to insure that all fire lane markings required by Sec. 503.3 be kept so that they are easily distinguishable by the public.

Sec. 503.2 is amended by the deleting Section 503.2.5

Sec. 503.2.6 is amended by the addition of the following:

Sec. 503.2.6 Bridges and elevated surfaces. All bridges and fire lane grades shall meet the City of Plano Engineering specifications.

Sec. 503.3 is amended to read as follows:

Sec. 503.3 Marking. Approved striping or, when allowed by the code official, signs, or both shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Signs and striping 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 six inches (6”) in width to show the boundaries of the lane. The words “NO PARKING FIRE LANE” or “fire lane no parking” shall appear in four inch (4”) white letters at 25-foot 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 – shall read “NO PARKING FIRE LANE” or “FIRE LANE NO PARKING” and shall be 12” wide and 18” high. Signs shall be painted on a white background with letters and borders in red, using not less than 2” lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6’6”) above finished grade. Signs shall be spaced not more than fifty feet (50’) apart. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

Sec. 503.4 is amended to read as follows:

Sec. 503.4 Obstruction of fire apparatus access road or fire lane.

- (a) It shall be an offense for any person to obstruct any portion of a fire apparatus access road or fire lane.

- (b) It shall be an offense for any person, corporation, or association with ownership in or care, custody, or control over property to intentionally, knowingly, or recklessly cause or allow any obstruction of any portion of a fire apparatus access road or fire lane on the property.
- (c) It shall be an offense for any person, corporation, or association with ownership in or care, custody, or control over property to intentionally, knowingly, or recklessly fail to mark or maintain a fire apparatus access road in compliance with Section 503 of this Article.
- (d) Obstruction with Motor Vehicle.
 - a. *Presumption.* In a prosecution under Sec. 503.4 (a), where the obstruction resulted from the parking, standing, or stopping of a motor vehicle, it is presumed that the registered owner of the motor vehicle is the person who left the vehicle standing at the time of offense.
 - b. *Penalty for Obstruction with Motor Vehicle.* In a prosecution under Sec. 503.4 (a), where the obstruction resulted from the parking, standing, or stopping of a motor vehicle, a person adjudged guilty shall be fined in an amount not to exceed five hundred dollars (\$500.00), notwithstanding any other penalty in the City of Plano Code of Ordinances. Each and every day any such violation continues constitutes a separate offense.
- (e) General Penalty. A person, corporation or association adjudged guilty of violating Sec. 503.4 (a) where the obstruction did not result from the parking, standing or stopping of a motor vehicle, or adjudged guilty of violating Sec. 503.4 (b) or (c), shall be fined in an amount not to exceed two thousand dollars (\$2,000), in accordance with City of Plano Code of Ordinances, Sec. 8-16. Each and every day any such violation continues constitutes a separate offense.

Sec. 503.6 is amended to read as follows:

Sec. 503.6 Security gates. Where security fencing is necessary, the owner shall provide gates or openings which may be secured. Gates when provided must open fully in either direction or be of a sliding or raised arm type. The main entry gates serving Group R & I occupancies shall be equipped with an approved automated entry system. All other entry points along the fire lane must be automated or Knox compatible as approved by the Fire Chief, to permit immediate access by fire personnel and equipment in the event of fire or emergency.

Section 505 Premises Identification.

Sec. 505.1 is amended to read as follows:

Sec. 505.1 Address Identification. Approved numerals of a minimum 6" height and of a color contrasting with the background designating the address shall be placed on all new and existing buildings or structures in such a position as to be plainly visible and legible from the street or road fronting the property and from all rear alleyways where said alleyways exist. Where buildings do not immediately front a street, approved 6-inch height building numerals or address and 3-inch height suite/apartment numerals of a color contrasting with the background of the building shall be placed on all new and existing buildings or structures. Numerals or addresses shall be posted on a minimum 20 inch by 30-inch background or border. Address numbers shall be Arabic numerals or alphabet letters. The minimum stroke width shall be 0.5 inches. Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response.

Exception. R-3 Single Family occupancies shall have approved numerals of a minimum 4-inches in height and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

Sec. 505 is amended by the addition of the following:

Sec. 505.3 Address Marking in Parking Garages. An approved sign displaying the building name and address with a minimum 1-inch-high letters and numerals on a contrasting background in new and existing parking garages. The signs shall be located in each elevator lobby and at the entrance to each stairwell.

Sec. 506 Key Boxes

Sec. 506.1 add new Section 506.1.3 to read as follows:

Sec. 506.1.3 Knox Box approved locations. A key box shall be provided at the entrances to each sprinkler riser room and pump room. An additional key box shall be provided at the main entrance of large facilities typically where the remote annunciator or fire alarm control panel is located.

Section 507 Fire Protection Water Supplies

Sec. 507.4 is amended to read as follows:

Sec. 507.4 Water supply test. The water supply test used for hydraulic calculation of fire protection systems shall be conducted in accordance with NFPA 291 "Recommended Practice for Fire Flow Testing and Marking of Hydrants" and within one year of sprinkler plan submittal. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings.

Sec. 507.5.1 is amended to read as follows:

Sec. 507.5.1 Where Required. As properties develop, fire hydrants shall be located at all intersecting streets and at the maximum spacing indicated in Table 903.4.2. Distances between hydrants shall be measured along the route that fire hose is laid by a fire vehicle from hydrant to hydrant.

Maximum Distance Between Hydrants

OCCUPANCY	SPRINKLERED	NOT SPRINKLERED
Residential (1 & 2 Family)	600 feet	500 feet
Residential (Multi Family)	400 feet	300 feet
All Other	500 feet	300 feet

Table 903.4.2

1. **PROTECTED PROPERTIES.** Fire hydrants required to provide a supplemental water supply for automatic fire protection system shall be within 100 feet of the fire department connection for such system and shall have an isolation valve located between the connections to a looped main.
2. **FIRE HYDRANT LOCATIONS.** Fire hydrants shall be located 4 feet to 7 feet back of curb or fire lane and shall not be located in the bulb of a cul-de-sac.
3. **MINIMUM NUMBER OF FIRE HYDRANTS.** There shall be a minimum of two (2) fire hydrants serving each property within the prescribed distances listed above.

Sec. 509 Fire Protection and Utility Equipment Identification and Access

Add Section 509.1.2 to read as follows:

Sec. 509.1.2 Sign Requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of 3/4 inch when located inside a building and 2 inches when located outside, or as approved by the *fire code official*. The letters shall be of a color that contrasts with the background.

Sec. 510 Emergency Responder Communications Enhancement Systems

Add paragraph at the end of Sec. 510.6.1 to read as follows:

The inspection radio contractor shall provide an annual inspection tag/sticker on the ERCES' BDA and any remote annunciator. Tag/sticker shall identify approved inspection contractor's name, physical address, phone number, an FCC license number, and inspector's name, as well as the date of inspection. System shall not be tagged until all inspection requirements of this section are conducted. Tag/sticker shall be blue in color for a passing system. Tag/sticker shall be red in color for a failing system with reasons

for failure indicated on the tag if possible. If red tag/sticker is placed, AHJ/Fire Marshal shall be notified within a maximum of 24 hours.

Section 605 Fuel-Fired Appliances

Section 605.4 through 605.4.2.2; is amended to read as follows:

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

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

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

605.4.2 Fuel oil storage inside buildings. Fuel oil storage inside buildings shall comply with Sections 605.4.2.1 through 605.4.2.8 and Chapter 57.

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

605.4.2.2 Quantity limits. One or more fuel oil storage tanks containing Class II or III combustible liquid shall be permitted in a building. The aggregate capacity of all tanks shall not exceed the following:

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

Section 807 Decorative Materials and Artificial Decorative Vegetation in New and Existing Buildings

Sections. 807.5.2.2 and 807.5.5.2 are amended by the addition of an exception:

Section 807.5.2.2 Artwork in corridors. Artwork and teaching materials shall be limited on the walls of *corridors* to not more than 20 percent of the wall area.

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.

Section 807.5.5.2 Artwork in corridors. Artwork and teaching materials shall be limited on the walls of *corridors* to not more than 20 percent of the wall area.

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.

Section 901 General

Sec. 901.5; amended by the addition of the following to the first paragraph:

All required tests shall be conducted by and at the expense of the owner or his representative. The Fire Department shall not be held responsible for any damages incurred in such test. Where it is required that the Fire Department witness any such test, such test shall be scheduled with a minimum of 48-hour notice to the Fire Chief or his representative.

Sec. 901.7 is amended to read as follows:

Sec. 901.7 Systems out of service. Where a required fire protection system is out of service or in the event of an excessive number of activations, alarms or unwanted alarms, the fire department and the code official shall be notified immediately and, where required by the code official, the building shall either be evacuated or standby personnel 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 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.

Section 903 Automatic Sprinkler Systems

Sec. 903.1.1 is amended to read as follows:

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

Sec. 903.2 is amended to read as follows:

Sec. 903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machines spaces, and elevator hoist ways. Storage shall not be allowed within the elevator machine room.

Sec. 903.2 is amended by deleting the Exception:

Sec. 903.2.1.1, 903.2.1.3, 903.2.1.4, are amended to read as follows:

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

1. The fire area exceeds 6,000 square feet (557.4m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.
4. The fire area contains a multi theater complex.

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

1. The fire area exceeds 6,000 square feet (557.4m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than the level of exit discharge.

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

1. The fire area exceeds 6,000 square feet (557.4m²).
2. The fire area has an occupant load of 300 or more

3. The fire area is located on a floor other than the level of exit discharge.

Sec. 903.2.2 is amended to read as follows:

903.2.2 Group B. An automatic sprinkler system shall be provided for Group B occupancies as required in Sections 903.2.2.1, 9.3.2.2.2, and 903.2.2.3.

Add new section 903.2.2.3 to read as follows:

Sec. 903.2.2.3 Fire area. Where a Group B fire area exceeds 6,000 square feet (557.4 meters squared).

Sec. 903.2.3, 903.2.4, 903.2.4.2, 903.2.7, 903.2.9, 903.2.9.1, and 903.2.9.3 are amended to read as follows:

Sec. 903.2.3 Group E. An automatic sprinkler system shall be provided for Group E Occupancies where one of the following conditions exists:

1. Throughout all Group E fire areas greater than 6,000 square feet (557.4m²) in area;
2. Throughout every portion of educational building below the level of exit discharge.

Exception: An automatic sprinkler system is not required in any fire area or area below the level of exit discharge where every classroom throughout the building has at least one exterior exit door at ground level.

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

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

1. Where a Group F-1 fire area exceeds 6,000 square feet (557.4m²);
2. Where a Group F-1 fire area is located more than three stories above grade plane;
or
3. Where combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230m²).
4. A Group F-1 occupancy is used to manufacture lithium-ion or lithium metal batteries.

5. A Group F-1 occupancy is used to manufacture vehicles, energy storage systems or equipment containing lithium-ion or lithium metal batteries where the batteries are installed as part of the manufacturing process.

903.2.4.2 Group F-1 distilled spirits. An automatic sprinkler system shall be provided throughout a Group F-1 fire area used for the manufacture of distilled spirits involving more than 120 gallons of distilled spirits (>20% alcohol) in the fire area at any one time.

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

1. Where a Group M fire area exceeds 6,000 square feet (557.4m²).
2. Where a Group M fire area is located more than three stories above grade plane.
3. Where the combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230m²).

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

1. A Group S-1 fire area exceeds 6,000 square feet (557.4m²).
2. A Group S-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230m²).
4. A Group S-1 *fire area* used for the storage of commercial trucks or buses where the *fire area* exceeds 5,000 square feet (464m²).
5. A Group S-1 fire area used for the storage of lithium-ion or lithium metal powered vehicles where the fire area exceeds 500 square feet (46.4m squared).

Sec. 903.2.9.1 Repair Garages. An automatic sprinkler system shall be provided throughout all buildings used as Repair Garages where one of the following conditions exists:

1. Buildings two or more stories in height, including basements, with a fire area containing a repair garage exceeding 6,000 square feet (557.4m²).
2. One-story buildings with a fire area containing a repair garage exceeding 6,000 square feet (557.4m²).

3. Buildings with a repair garage servicing vehicles parked in the basement.
4. A Group S-1 *fire area* used for the repair of commercial trucks or buses where the *fire area* exceeds 5,000 square feet (464m²).
5. A Group S-1 fire area used for the storage of lithium-ion or lithium metal powered vehicles where the fire area exceeds 500 square feet (46.4 meter squared).

903.2.9.3 Group S-1 distilled spirits or wine. An automatic sprinkler system shall be provided throughout a Group S-1 fire area used for the bulk storage of distilled spirits or wine involving more than 120 gallons of distilled spirits or wine (>20% alcohol) in the fire area at any one time.

Sec. 903.2.9.4 is amended by the deleting the exception.

Sec. 903.2.9; add new Section 903.2.9.5 to read as follows:

Sec. 903.2.9.5 Self-service storage facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities. A screen shall be installed at eighteen (18) inches below the level of the sprinkler heads to restrict storage above that level. This screen shall be a mesh of not less than one (1) inch nor greater than six (6) inches in size. The screen and its supports shall be installed such that all elements are at least eighteen (18) inches below any sprinkler heads.

Sec. 903.2.10 is amended by the addition of a 4th condition:

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

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

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

3. Where the *fire area* of the open parking garage, in accordance with Section 406.5 of the *International Building Code*, exceeds 48,000 square feet (4460 m²).
4. Where two or more sides of the garage are not accessible by the Fire Department ladder truck.

Sec. 903.2.11.3 is amended to read as follows and deleting the exception:

903.2.11.3 Buildings 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories with an occupant load of 30 or more, other than penthouses in compliance with Section 1511 of the *International Building Code*, located 35 feet (10,688 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Sec. 903.2.11; add new Sections 903.2.11.7, 903.2.11.8, 903.2.11.9, and 903.2.11.10 to read as follows:

Sec. 903.2.11.7 High Piled Combustible Storage. For any building with a clear height exceeding 12 feet (4,572 mm), see Chapter 32 to determine if those provisions apply.

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

Sec. 903.2.11.9 Buildings Over 6,000 sq. ft. An automatic sprinkler system shall be installed throughout all buildings over 6,000 sq. ft. and greater, and in all existing buildings that are enlarged to be 6,000 square feet or greater, and in buildings greater than 6,000 square feet which are enlarged. For the purpose of this provision, fire walls, fire barriers, or horizontal assemblies shall not define separate buildings.

Exceptions:

1. Parking garages in compliance with Section 903.2.10 of the International Fire Code.
2. When of non-combustible construction, the area of awning extension or free-standing canopies, both sides, and not used for display or storage shall not be considered for requiring sprinkler protection for areas greater than 6,000 square feet but less than otherwise required in this code.

Sec. 903.2.11.10 Expanded Tenant Spaces. Fire sprinklers shall be installed in all tenant spaces where the total fire area exceeds 6,000 square feet. For the purpose of fire sprinklers, fire walls, fire barriers, or horizontal assemblies shall not be used to separate single tenant fire areas.

Sec. 903.3.1.1.1 is amended to read as follows:

Sec. 903.3.1.1.1 Exempt locations. When approved by the fire code official, automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. 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. 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.
3. Elevator machine rooms, machinery spaces, and hoist ways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

Sec. 903.3.1.2 is amended by adding the following paragraph at the end.

Sec. 903.3.1.2 NFPA 13R Sprinkler Systems. Where allowed in buildings of Group R, up to and including four stories in height, automatic sprinklers shall be installed throughout in accordance with NFPA 13R. Sprinkler systems installed in accordance with 13R shall include sprinkler protections in combustible attics of buildings two (2) or more stories in height.

Sec. 903.3.1; add new Sections 903.3.1.4 and 903.3.1.5 to read as follows:

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

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

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

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

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

Sec. 903.3.1.5 Installation. Automatic sprinkler and standpipe systems shall be installed with the following:

1. A single underground supply from a looped water main and point for the Fire Department Connection (FDC) shall be provided for all buildings.
2. Fire department connections for automatic sprinklers and standpipes shall be provided with one 5-inch Storz connection. For system demands greater than 150 psi an additional 2 ½ inch Siamese connection and sign identifying pressure demand shall be required. Each shall have an independent check valve.
3. All inspectors' test, ball-drips, and main-drains shall be piped directly to the outside of the building.
4. At least one inspection test valve shall be located at the remote system area.
5. Fire pumps shall be equipped with a properly sized test header.
6. Underground piping shall have a 10-foot minimum separation from all other utilities and placed in a separate trench. Underground piping within 5 feet of the building may be combined with other utilities for entrance to the building.
7. Porches and balconies shall be sprinkled on all Group R-2 and R-3 occupancies.
8. A minimum of 4-feet of pipe between the check valve and inside wall of the Fire Department Connection.

Sec. 903.3.5 is amended to include a second paragraph to read as follows:

Water supply as required for automatic sprinkler and automatic standpipe systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10-psi safety factor.

Sec. 903.3.9 is amended to read as follows:

Sec. 903.3.9 Floor control valves. Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor.

Sec. 903.4.1 is amended to include a second paragraph after the exceptions to read as follows:

Sec. 903.4.1 Electronic Supervision. 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 a minimum of 45 seconds and not more than 90 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.

Sec. 903.4.3 is amended to include a second paragraph to read as follows:

Sec. 903.4.3 Alarms. The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

Section 905 Standpipe Systems

Sec. 905.2 is amended to read as follows:

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

Sec. 905.3.2 Group A; is amended by deleting exceptions 1 and 2.

Sec 905.3 is amended by adding new Section 905.3.8 to read as follows:

Sec. 905.3.8 Travel Distance. Class I standpipes shall also be required on all occupancies in which the distance from accessible points for Fire Department ingress to any point in the structure exceeds two hundred fifty feet (250') along the route that a fire hose is laid as measured from the fire lane.

Sec. 905.4 Location of Class I standpipe hose connections item 5 is amended to read as follows:

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 stairways 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.

Sec. 905.4 is amended to by the addition of item 7 as follows:

7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors or pathways thereafter.

Sec. 905; is amended by deleting Section 905.5.

Sec. 905; is amended by deleting Section 905.6

Sec. 905.9 is amended to add a second paragraph after the exceptions to read as follows:

Sec. 905.9 Valve Supervision. 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 a minimum of 45 seconds and not more than 90 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.

Sec. 905.11; is amended to read as follows:

Sec. 905.11 Locking Standpipe Outlet Caps. Locking standpipe caps are on the outlets of dry standpipe connections where the responding fire department carries appropriate key wrenches for removal that are compatible with locking FDC connection caps. Locking caps are required on all new systems and existing systems where caps are missing.

Sec. 905 Standpipe systems is amended by adding section 905.13 to read as follows:

Sec. 905.13 Manual Systems. Design required for such systems shall be provided in conformance with the supply requirements of the respective standards. However, every manual fire protection system shall be designed with a supply of 150 psi at the FDC.

Section 906 Portable Fire Extinguishers`

Sec. 906.1 is amended by deleting 906.1(1) exception 3.

Section 907 Fire Alarm and Detection Systems

Sec. 907.1.1 is amended by adding the following sentence:

Sec. 907.1.1 Construction documents. Plans for fire alarm systems shall be in accordance with Plano Fire-Rescue's Fire Alarm Submittal Guidelines.

Sec. 907.1 is amended by adding new Section 907.1.4 to read as follows:

Sec. 907.1.4 Design Standards. All alarm systems new or replacement shall be addressable. Alarm systems serving more than 20 smoke detectors shall be analog addressable.

Exception: Existing systems need not comply unless the total building remodel or expansion initiated after January 1, 1998, as adopted, exceeds 30% of the building. When cumulative building remodel or expansion exceeds 50% of the building must comply within 18 months of permit application.

Sec. 907.2.1 is amended to read as follows:

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

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

Activation of fire alarm notification appliances shall:

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

Sec. 907.2.3 is amended to read as follows, Exceptions to remain:

Sec. 907.2.3 Group E. A manual alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems. Where automatic fire sprinklers are not provided, a full-coverage smoke detection system shall be provided in all Group E occupancies.

Sec. 907.2.3, Exception 1 is amended to read as follows:

1. A manual fire alarm system is not required in Group E educational and day care occupancies with an occupant load of less than 50 when provided with an approved automatic sprinkler system.

Sec. 907.2.3; add new Section 907.2.3.1 to read as follows:

Sec. 907.2.3.1 In-Home Daycare. Residential In-Home daycare with not more than 12 children shall use interconnected single station detectors in all habitable rooms.

Sec. 907.2.6; add new Section 907.2.6.4 to read as follows:

Sec. 907.2.6.4 Group I-4 Occupancies. An approved smoke detection system shall be installed in Group I-4 occupancies. Where automatic fire sprinklers are not provided, a full-coverage smoke detection system shall be provided in all Group I-4 occupancies.

Sec. 907.2.10.1 is amended to read as follows, Exception to remain:

Sec. 907.2.10.1 Public and Self-Storage occupancies. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group S public– and self–storage occupancies for interior *corridors* and interior common areas. Visible notification appliances are not required within storage units.

Sec. 907.2.13, exception 3 is amended to read as follows:

3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the *International Building Code*, when used for open air seating; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants and similarly enclosed areas.

Sec. 907.4.2; add new Section 907.4.2.7 to read as follows:

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

Sec. 907.5.2; add new Section 907.5.2.4 to read as follows:

Sec. 907.5.2.4 I-2 and Group B Occupancies

Occupant notification systems are not required where private mode fire alarm systems are needed in critical care areas of I-2 and Group B Ambulatory Occupancies. A Chime sound shall be used as the audible notification at the constantly attended location and public areas where audible notification is required.

A visible alarm notification appliance installed in a nurses control station or other continuously attended staff location shall be provided as an acceptable alternative to the installation of audible alarm notification appliances throughout the occupancy.

In areas where private mode fire alarm system is being installed, audible alarm notification appliances are not required in critical care areas of Group I-2 and Group B- Ambulatory Occupancies.

Visible alarm notification appliances are not required in critical care areas of Group I-2 and Group B – Ambulatory Occupancies.

The private mode area and public mode area of the occupancy **shall be identified on the plans** for review.

Sec. 907.6.1; add new Section 907.6.1.1 to read as follows:

Sec. 907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an signaling line circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet of separation horizontal and one foot vertical between supply and return circuit conductors. Notification appliance circuits (NAC) may be installed as Class B circuits.

Sec. 907.6.3; is amended by deleting all four (4) exceptions.

Sec. 907.6.3; add new Sections 907.6.3.2 and 907.6.3.3 to read as follows:

Sec. 907.6.3.2 Communication Requirements. All alarm systems, new or replacement, shall transmit alarm, supervisory, and trouble signals descriptively to the approved central station, remote supervisory station or proprietary supervising station as defined in NFPA 72, with the device designation and location of addressable device identification. Alarms shall not be permitted to be transmitted as a General Alarm or Zone condition.

Sec. 907.6.3.3 Flow detectors and electronic monitoring. Sprinkler and standpipe system water flow detectors shall be provided for each floor zone to the sprinkler system and shall cause an alarm upon detection of water flow for a minimum of 45 seconds and not more than 90 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a trouble signal at the central station upon tampering.

Section 910 Smoke and Heat Removal

Sec. 910.2; add new Section 910.2.3 to read as follows:

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

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394m²) in single floor area.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

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

Exception. Buildings of noncombustible construction containing only noncombustible materials.

Sec 910.3.1 is amended by adding the following sentence: Gravity operated drop out vents are prohibited.

Section 912.2 Fire Department Connections

Sec.912.2; add new Section 912.2.3 to read as follows:

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

Sec. 912.4.1 is amended to read as follows:

Sec. 912.4.1 Locking Fire Department Connection Caps. All new fire department connections and existing where caps are missing shall be protected by Knox locking caps.

Section 913 Fire Pumps

Sec. 913.2.1 is amended by adding the following paragraph and exception:

Sec. 913.2.1: Protection of Fire Pump Room. When located on the ground level, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

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

Sec. 913.4 is amended to read as follows:

Sec. 913.4 Valve Supervision. Where provided, the fire pump suction, discharge and bypass valves, and the isolation valves on the backflow prevention devices or assembly shall be supervised open by a central-station, proprietary, or remote-station signaling service.

The fire-pump system shall also be supervised for “loss of power”, and “phase reversal” on supervisory circuits, and “pump running” as an alarm condition and shall report individually to the monitoring station.

Section 915 Carbon Monoxide (CO) Detection

Sec. 915 delete all and replace as follows:

915.1 General. New and existing building shall be provided with carbon monoxide (CO) detection in accordance with Sections 915.2 through 915.5.

915.2 Where required. Carbon monoxide detection shall be provided in interior spaces, other than dwelling units, that are exposed to a carbon monoxide source in accordance with Sections 915.2.1 through 915.2.3. Carbon monoxide detection for dwelling units or sleeping units that are exposed to a carbon monoxide source shall be in accordance with Section 915.2.4.

915.2.1 Interior spaces with direct carbon monoxide sources. In all occupancies, interior spaces with a direct carbon monoxide source shall be provided with carbon monoxide detection located in close proximity to the direct carbon monoxide source and in accordance with Section 915.3.

Exception: Where environmental conditions in an enclosed space are incompatible with carbon monoxide detection devices, carbon monoxide detection shall be provided in an approved adjacent location.

915.2.2 Interior spaces adjacent to a space containing a carbon monoxide source. In Groups A, B, E, I, M and R Occupancies, interior spaces that are separated from and adjacent to an enclosed parking garage or an interior space that contains a direct carbon monoxide source shall be provided with carbon monoxide detection if there are communicating openings between the spaces. Detection devices shall be located in close proximity to communicating openings on the side that is furthest from the carbon monoxide source and in accordance with Section 915.3

Exceptions:

1. Where communicating openings between the space containing a direct carbon monoxide source and the adjacent space are permanently sealed airtight, carbon monoxide detection is not required for the adjacent space.

2. Where the fire code official determines that the volume or configuration of the adjacent interior space is such that dilution or geometry would diminish the effectiveness of carbon monoxide detection devices located in such spaces, detection devices additional to those required by Section 915.2.1 shall be located on the side of communicating openings that is closest to the carbon monoxide source.

915.2.3 Interior spaces with forced-indirect carbon monoxide sources. In all occupancies, interior spaces with a forced-indirect carbon monoxide source shall be provided with carbon monoxide detection in accordance with either of the following:

1. Detection in each space with a forced-indirect carbon monoxide source, located in accordance with Section 915.3.
2. Detection only in the first space served by the main duct leaving the forced-indirect carbon monoxide source, located in accordance with Section 915.3, with an audible and visual alarm signal provided at an approved location.

915.2.4 Dwelling units and sleeping units. Carbon monoxide detection for dwelling units and sleeping units shall comply with Sections 915.2.4.1 and 915.2.4.2.

915.2.4.1 Direct carbon monoxide sources. Where a direct carbon monoxide source is located in a bedroom or sleeping room, or a bathroom attached to either, carbon monoxide detection shall be installed in the bedroom or sleeping room. Where carbon monoxide detection is not installed in bedrooms or sleeping rooms, carbon monoxide detection shall be installed outside of each separate sleeping area in close proximity to bedrooms or sleeping rooms for either of the following conditions:

1. The dwelling unit or sleeping unit has a communicating opening to an attached, enclosed garage.
2. A direct carbon monoxide source is located in the dwelling unit or sleeping unit outside of bedrooms or sleeping rooms.

915.2.4.2 Forced-indirect carbon monoxide sources. Bedrooms or sleeping rooms in dwelling units or sleeping units that are exposed to a forced-indirect carbon monoxide source shall be provided with carbon monoxide detection in accordance with Section 915.2.4.1 or Section 915.2.3.

915.3 Location of detection devices. Carbon monoxide detection devices shall be installed in accordance with manufacturer's instructions in a location that avoids dead air spaces, turbulent air spaces, fresh air returns, open windows, and obstructions that would inhibit accumulation of carbon monoxide at the detection location. Carbon monoxide detection in air ducts or plenums shall not be permitted as an alternative to required detection locations.

915.4 Permissible detection devices. Carbon monoxide detection shall be provided by a carbon monoxide detection system complying with Section 915.4.2 unless carbon monoxide alarms are permitted by Sections 915.4.1.

915.4.1 Carbon monoxide alarms. Carbon monoxide alarms complying with Sections 915.4.1.1 through 915.4.1.3 shall be permitted in lieu of a carbon monoxide detection system in both of the following:

1. Dwelling units and sleeping units.
2. Locations other than dwelling units or sleeping units, where approved, provided that the manufacturer's instructions do not prohibit installation in locations other than dwelling units or sleeping units and that the alarm signal for any carbon monoxide alarm installed in a normally unoccupied location is annunciated by an audible and visual signal in an approved location.

915.4.1.1 Power source. In buildings with a wired power source, carbon monoxide alarms shall receive their primary power from a permanent connection to building wiring, with no disconnecting means other than for overcurrent protection, and shall be provided with a battery backup. In buildings without a wired power source, carbon monoxide alarms shall be battery powered.

Exception: For existing buildings not previously required to have carbon monoxide alarms permanently connected to a wired power source, existing battery-powered and plug-in with battery backup carbon monoxide alarms shall be permitted to remain in service. When replaced, replacement with battery-powered and plug-in with battery backup carbon monoxide alarms shall be permitted.

915.4.1.2 Listings. Carbon monoxide alarms shall be listed in accordance with UL 2034. Combination carbon monoxide/smoke alarms shall also be listed in accordance with UL 217.

915.4.1.3 Interconnection. Where more than one carbon monoxide alarm is installed, actuation of any alarm shall cause all of the alarms to signal an alarm condition.

915.4.2 Carbon monoxide detection systems. Carbon monoxide detection systems shall be installed in accordance with NFPA 72.

915.4.2.1 Fire alarm system integration. Where a building fire alarm system or combination fire alarm system, as defined in NFPA 72, is installed, carbon monoxide detection shall be provided by connecting carbon monoxide detectors to the fire alarm system. Where a building fire alarm system or a combination fire alarm system is not installed, carbon monoxide detection shall be provided by connecting carbon monoxide detectors to a carbon monoxide detection system complying with NFPA 72.

915.4.2.2 Listings. Carbon monoxide detectors shall be listed in accordance with UL 2075. Combination carbon monoxide/smoke detectors shall be listed in accordance with UL 268 and UL 2075.

915.4.2.3 Alarm notification. For other than Group E Occupancies, activation of a carbon monoxide detector shall initiate alarm notification in accordance with any of the following:

1. An audible and visible alarm notification throughout the building and at the control unit.
2. Where specified in an approved fire safety plan, an audible and visible alarm in the signaling zone where the carbon monoxide has been detected and other signaling zones specified in the fire safety plan, and at the control unit.
3. Where a sounder base is provided for each detector, an audible alarm at the activated carbon monoxide detector and an audible and visible alarm at the control unit.

For Group E Occupancies having an occupant load of 30 or less, alarm notification shall be provided in an on-site location staffed by school personnel or in accordance with the notification requirements for other occupancies. For Group E occupancies having an occupant load of more than 30, an audible and visible alarm shall be provided in an on-site location staffed by school personnel.

915.5 Maintenance. Carbon monoxide alarms and carbon monoxide detection systems shall be maintained in accordance with NFPA 72 and the manufacturer's instructions. Carbon monoxide alarms and carbon monoxide detectors that become inoperable or begin producing end-of-life signals shall be replaced.

Section 1004 Occupant Load

Sec. 1004.5 is amended by deletion of the exception:

Section 1006.2.1 exception 3 is amended to read as follows:

3. Unoccupied rooftop mechanical rooms and penthouses are not required to comply with common path of egress travel distance measurements.

Table 1010.2.4; amend Table - Manual Bolts, Automatic Flush Bolts and Constant Latching Bolts on Inactive Leaf of A pair of Doors; to add Group M and A occupancies as follows:

Add Group M to Line item #1 in Table 1010.2.4: Group B, F, M or S occupancies with occupant load less than 50. (remainder unchanged)

Add Group A and M to line item #2 in Table 1010.2.4: Group A, B, F, M, or S occupancies where the building is equipped...(remainder unchanged)

Section 1020 Corridors

Section 1020.2 Construction; add exception 6 to read as follows:

6. In group B occupancies, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke- detection within the corridor. The actuation of any detector must activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors must be connected to an approved automatic fire alarm system where such system is provided.

Section 1030.1.1.1 Spaces under grandstands and bleachers; is amended by the deletion of this section.

Section 1103 Fire Safety Requirement for Existing Buildings

Sec. 1103; *add new Sections 1103.5.6, 1103.5.7, and 1103.7.7 to read as follows:*

Sec. 1103.5.6 Spray booths and rooms. Existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 2404.

Sec. 1103.5.7 Existing R-1, 2, 3, and 4 Occupancies: In R-1, 2, 3, and 4 occupancies where a fire has occurred and displaces one or more occupants, the affected building shall be fire-sprinkled prior to re-occupancy of the unit/building.

Sec. 1103.7.7 Fire Alarm System Design Standards. All alarm systems new or replacement shall be addressable. Alarm systems serving more than 20 smoke detectors shall be analog addressable.

Exception: Existing systems need not comply unless the total building remodel or expansion initiated after January 1, 1998, as adopted, exceeds 30% of the building. When cumulative building remodel or expansion exceeds 50% of the building must comply within 18 months of permit application.

Sec. 1103.9 is amended to read as follows:

Sec. 1103.9 Carbon monoxide detection. Carbon monoxide detection shall be installed in existing building in accordance with Section 915.

Section 1201 General

Section 1201 is amended by the addition of new section 1201.4 to read as follows:

Section 1201.4 Electrical Shutdown. Energy Systems including solar photovoltaic power systems, stationary fuel cell power systems, Electrical energy storage systems, shall have a remote power shut down box. The location shall be at an approved exterior door entrance. The box shall only be accessible by the fire department and shall be keyed to the fire departments Key Box as outlined in section 506 on the International Fire Code.

Section 1207.2 is amended to read as follows:

Section 1207.2 Commissioning, decommissioning, operation and maintenance. Commissioning, decommissioning, operation and maintenance shall be conducted in accordance with this section. In addition to the ordinary inspection and test requirements that buildings, structures and parts thereof are required to undergo, Energy Storage Systems subject to the provisions of Section 1207 shall undergo special inspections and tests sufficient to verify the proper commissioning of the Energy Storage System in its final installed condition. The design submission accompanying the construction documents shall clearly detail procedures and methods to be used and the items subject to such inspections and tests. Such commissioning shall be in accordance with generally accepted engineering practice and, where possible, based on published standards for the particular testing involved. The special inspections and tests required by this section shall be conducted under the same terms as in Chapter 17 of the International Building Code.

Section 3307 Fire Department site Access and Water Supply

Sec. 3307.1; is amended to read as follows:

Sec. 3307.1 Required access. When fire apparatus access roads are required to be installed for any structure or development, they shall be approved and installed prior to the time of which construction has progressed beyond completion of the foundation of any structure.

Section 4104 – Portable Fuel-Fired Cooking Appliances

Section 4104.2; Change to read as follows:

4104.2 Open-flame cooking devices. Charcoal grills and other similar devices used for cooking shall not be located or used on combustible balconies, decks, or within 10 feet (3048 mm) of combustible construction.

Exceptions:

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

Section 5601 General

Sec. 5601.1.3; is amended to read as follows:

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

Exceptions:

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

The presence or use of fireworks within the jurisdiction of the City of Plano in violation of this ordinance is hereby declared to be a common and public nuisance. The restrictions of this Section shall be applicable and in force throughout the territory of the City of Plano, Texas, and extending for a distance outside the City limits for a total of 5,000 feet; provided that this Section shall not be in effect within any portion of such 5,000 feet area which is contained within the territory of any other municipal corporation.

Sec. 5601.3 is amended to read as follows:

Sec. 5601.3 Prohibited explosives. Permits shall not be issued or renewed for possession, manufacture, storage, handling, sale or use of explosives within the city limits of Plano.

Section 5608 Fireworks Display

Sec. 5608; add new Section 5608.11 to read as follows:

Sec. 5608.11 Ignition. Aerial shells shall be ignited by lighting the tips of fuses by an electrical ignition source except when manual ignition is approved by the Fire Chief. Operators shall not place any part of their bodies over the throat of the mortar.

Section 5703 General Requirements

Sec. 5703.6 is amended to add the following sentence:

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

Section 5704 Storage

Sec. 5704.2.7; is amended by the addition of the following:

Secondary containment shall be provided for all Above and Underground Storage Tanks (UST) and product lines in the form of double wall tanks and piping. Alternate methods of secondary containment may be used if approved by the Chief.

Sec. 5704.2.9.6.1 is amended to read as follows:

Sec. 5704.2.9.6.1 Location Where Above-Ground Tanks are Prohibited. The storage of flammable or combustible liquids in outside above ground tanks is prohibited within each and every zoning district within the City of Plano with the exception of those districts which are zoned for light industrial zoning use. Installation of above ground tanks in other than light industrial zoning districts shall be permitted at the discretion of the Fire Chief following his review of the proposed installation location, and the fire protection for the storage area. Tanks shall not be located within one hundred feet (100') of the property line of any Group E, I or R occupancies.

Exception: Above-Ground UL 142 fuel tanks up to 3,000 gal. containing Class II combustible liquid supplying only generators. Above-ground UL 2085 fuel tanks from 3,001 to 12,000 gal. containing Class II combustible liquid supplying only generators.

5704.2.11.4; is amended to read as follows:

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

Sec. 5704.2.11.4.2; is amended to read as follows:

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

Sec. 5704.2.11.4 is amended by the addition of the following:

Sec. 5704.2.11.4.3 Observation Wells. Approved sampling tubes of a minimum 6 inches in diameter shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point 12 inches below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. Each tank site shall provide a sampling sump at the corners of the excavation with a minimum of 4 sumps. Sampling tubes shall be placed in the product line excavation within 10 feet of the tank excavation and one every 50 feet routed along product lines towards the dispensers. A minimum of two are required.

Section 5804 Storage

Sec. 5804.2; is amended by the addition of the following:

Sec. 5804.2.1 Maximum capacity within established limits. Tanks shall not be located within one hundred feet (100') of the property line of any Group A, E, I, or R occupancies.

Appendix L Requirements for Fire Fighter Air Replenishment Systems

Sec. L101; add new Section L101.2 to read as follows:

Sec. L101.2 Required Location. In new buildings, fill stations shall be required when any of the following conditions occur:

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

Each stairwell shall have a supply riser. SCBA fill stations shall be located on odd numbered floors in the primary stairwell and on even numbered stairs in the secondary stairwells. The primary stairwell will be the stair located closest to the main entrance.

Sec. L104.5 is amended to read as follows:

Sec. L104.5 Breathing air supply. Where a fire department mobile air unit is available, the FARS shall be supplied by an external mobile air connection in accordance with Section L104.14. A stored pressure air supply shall be provided in accordance with Section L104.5.1. A stored pressure air supply shall be added to a system supplied by an external mobile air connection provided that a means to bypass the stored pressure air supply is located at the external mobile air connection.

Sec. L104; is amended by deleting Section L104.13.1 Location.

Sec. L104.13.2 (5) is amended to read as follows:

Sec. L104.13.2 (5) Fill stations providing for the direct refilling of the fire fighters' breathing air cylinders using Rapid Intervention Crew/Company Universal Air Connection (RIC/UAC) fittings shall be used in lieu of cylinder fill stations that utilize containment areas.

Sec. L104.14; add paragraph to read as follows:

Sec. L104.14 External mobile air connection. The external mobile air connection shall be located with approved separation from the Fire Department Connection (FDC) to allow functionality of both devices by first responders: shall be visible from and within 50ft. of a

fire apparatus access road along an unobstructed path: and shall be located in an approved signed and secured cabinet.”

Section III. All provisions of the Code of Ordinances of the City of Plano, codified or uncoded, in conflict with the provision of this Ordinance are hereby repealed, and all other provisions of the Code of Ordinances of the City of Plano, codified or uncoded, not in conflict with this Ordinance shall remain in full force and effect.

Section IV. It is the intention of the City Council that this Ordinance and every provision hereof, shall be considered severable, and the invalidity or unconstitutionality of any section, clause, provision or portion of this Ordinance shall not affect the validity or constitutionality of any other portion of this Ordinance.

Section V. The repeal of any Ordinance or part of Ordinances effectuated by the enactment of this Ordinance shall not be construed as abandoning any action now pending under or by virtue of such Ordinance or as discontinuing, abating, modifying or altering any penalty accruing or to accrue, or as affecting any rights of the municipality under any section or provisions of any Ordinances at the time of passage of this Ordinance.

Section VI. This Ordinance shall become effective on August 1, 2025.

PASSED AND APPROVED on the 9th day of June, 2025.

John B. Muns, MAYOR

ATTEST:

Lisa C. Henderson, CITY SECRETARY

APPROVED AS TO FORM:

Paige Mims, CITY ATTORNEY