An Ordinance of the City of Plano, Texas, repealing in its entirety City of Plano Ordinance No. 2018-11-9, codified as Article II, Building Code, of Chapter 6 of the Code of Ordinances; and adopting the 2021 Edition of the International Building Code, with certain additions, deletions, and amendments, as the Building Code of the City of Plano; and providing a repealer clause, a severability clause, a savings clause, a penalty clause, a publication clause and an effective date.

**WHEREAS**, on November 26, 2018, by Ordinance No. 2018-11-9, the City Council of the City of Plano amended Ordinance 2016-3-11 to reflect changes to the International Building Code to align with the International Fire Code, and such were codified as Article II, Building Code, of Chapter 6 of the Code of Ordinances of the City of Plano ("City"); and

**WHEREAS**, on November 16, 2021, the Building Standards Commission held a public hearing to discuss the adoption of the 2021 Edition of the International Building Code, a publication of the International Code Council (I.C.C.), and to receive input from the general public and all persons who may be affected by the proposed adoption; and

**WHEREAS**, upon recommendation of the Building Standards Commission and upon full review and consideration of all matters attendant and related thereto, the City Council is of the opinion that the 2021 Edition of the International Building Code, and the additions, deletions, and amendments thereto, should be approved and adopted as the Building Code of the City.

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

**Section I.** Ordinance No. 2018-11-9, duly passed and approved by the City Council of the City of Plano, on November 26, 2018, is hereby repealed in its entirety.

**Section II.** A new Article II, Building Code, of Chapter 6 of the Code of Ordinances is hereby adopted and shall read in its entirety as follows:

## "ARTICLE II. BUILDING CODE

## **DIVISION 1. GENERALLY**

# Sec. 6-16. Penalty.

Any violation of the provisions or terms of this ordinance by any person, firm or corporation shall be a misdemeanor offense and shall be subject to a fine in accordance with Section 1-4(a) of the City Code of Ordinances for each offense. Every day a violation continues shall constitute a separate offense.

#### Sec. 6-17. Adopted.

The 2021 Edition of the International Building Code, a publication of the International Code Council (I.C.C.), is hereby adopted and designated as the Building Code of the City of Plano to

the same extent as if such Code were copied verbatim in this Article, subject to deletions, additions, and amendments prescribed in this Article. A copy of the 2021 Edition of the International Building Code is on file in the office of the City Secretary.

Sections 6-18 through 6-36. Reserved.

#### **DIVISION 2. AMENDMENTS**

Sec. 6-37. Deletions, Additions, Amendments.

The following deletions, additions, and amendments to the International Building Code adopted herein are hereby approved and adopted:

Section 101.4; change to read as follows (Sections 101.4.1 through 101.4.7 to remain unchanged):

**101.4 Referenced codes.** The other codes listed in Sections 101.4.1 through 101.4.8 and referenced elsewhere in this code, 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 said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the Electrical Code shall mean the Electrical Code as adopted.

*Section 101.4.8; add the following new section:* 

**101.4.8 Electrical.** The provisions of the Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

**Sections 103 and 103.1;** change to read as follows [Sections 103.2 and 103.3 to remain unchanged]:

# SECTION 103 BUILDING INSPECTIONS DEPARTMENT

**103.1 Creation of enforcement agency.** The Building Inspections Department ("agency") is hereby created and the official in charge thereof shall be known as the *building official*. The function of the agency shall be the implementation, administration and enforcement of the provisions of the code.

Section 104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas; delete in its entirety.

Section 104.10.1 Flood hazard areas; delete in its entirety.

**Section 105.1.1;** *change to read as follows:* 

**105.1.1 Toilet facilities.** At least one permanent or temporary toilet facility shall be maintained at every site where a building permit has been issued, as long as a building permit active for the project.

Permanent toilet facility is defined as a room in an existing building or in the building being constructed with a water closet installed in such a room that conforms to the Plumbing Code and is continuously available to all workers involved in a construction project.

Temporary toilet facility is defined as a portable, fully enclosed, chemically sanitized toilet, which is serviced and cleaned at least once each week.

A Stop Work Order may be issued for any project not in compliance with this section.

## **Section 105.1.2 Annual permit records;** *delete in its entirety.*

**Section 105.2;** change the Building category to read as follows (all other provisions and text of Section 105.2 to remain unchanged):

## **Building:**

- 1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided that the floor area is not greater than 120 square feet (11 m<sup>2</sup>).
- 2. [Item deleted.]
- 3. Oil derricks.
- 4. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
- 5. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18 925 L) and the ratio of height to diameter or width is not greater than 2:1.
- 6. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any *basement* or *story* below, and that are not part of an *accessible route* and not in the city right-of-way.
- 7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 8. Temporary motion picture, television and theater stage sets and scenery.
- 9. Prefabricated *swimming pools* accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, are not greater than 5,000 gallons (18 925 L) and are installed entirely above ground.

- 10. [Item deleted.]
- 11. Swings and other playground equipment accessory to detached one- and two-family *dwellings*.
- 12. Window awnings in Group R-3 and U occupancies, supported by an *exterior wall* that do not project more than 54 inches (1372 mm) from the *exterior wall* and do not require additional support.
- 13. Non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

## **Section 105.3;** *change to read as follows:*

**105.3 Application for permit.** To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the department of building safety for that purpose. Such application shall:

- 1. Identify and describe the work to be covered by the *permit* for which application is made.
- 2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
- 3. Indicate the use and occupancy for which the proposed work is intended.
- 4. Be accompanied by *construction documents* and other information as required in Section 107
- 5. State the valuation of the proposed work.
- 6. Be signed by the applicant, or the applicant's authorized agent.
- 7. Give such other data and information as required by the *building official*.
- 8. Be issued to a registered contractor.

<u>General</u>: To obtain a permit, the applicant shall be registered as a contractor may register by making application on forms provided by the *building official*.

#### **Exception:**

- 1. Homeowners may obtain permits for their private residence without being registered, however a contractor working under the homeowner's permit must meet state requirements for license registration.
- 2. Contractors exempt from local registration fees must show proof of state license.

Revocation/Suspension: A contractor's registration may be suspended for the following causes:

- 1. The contractor fails to finalize permits by obtaining the required approved inspections.
- 2. The contractor allows use or occupancy of a structure for which a permit was obtained without first obtaining the required authorization.
- 3. Expiration, suspension or revocation of required license or insurance.

**Section 105.3.1;** *change to read as follows:* 

**105.3.1 Action on application.** The *building 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 *building official* shall reject such application in writing, stating the reasons therefor. If the *building official* is satisfied that the proposed work conforms to the requirements of this code and laws and ordinances applicable thereto, the *building official* shall issue a *permit* therefor as soon as practicable. A demolition permit may be withheld for any building or structure within the Plano Historic Building and Site Survey as designated in the Preservation Plan for a period not exceeding thirty (30) days pending review by the Heritage Commission.

**Section 105.8;** *add to read as follows:* 

**105.8. Withdrawn permits.** *Permits* may be withdrawn by the applicant if no work has commenced on the project. Permit fees exceeding \$100.00 may be partially refunded. Where applicable, fees will be refunded at 80 percent of their original value, excluding the plan review and fire protection plan review deposits.

*Permits* for which work has commenced may not be withdrawn unless a subsequent permittee has obtained a *permit* to complete the work, or when work has started unless an inspection has been made and the building official has determined that the existing work has created no violation of any code or ordinance.

Expired *permits* may be withdrawn if determined by the *building official* that no work has commenced. Withdrawn *permits* with fees of less than one hundred (\$100) dollars are nonrefundable.

**Section 107.3.1;** *change to read as follows:* 

**107.3.1 Approval of construction documents.** When the *building official* issues a *permit*, the *construction documents* shall be *approved*, in writing, or by a stamp which states, "APPROVED AND APPROVED AS NOTED BY THE BUILDING OFFICIAL." One set of *construction documents* so reviewed shall be retained by the *building official*. The other set shall be returned to the applicant, shall be kept at the site of the work and shall be open to inspection by the *building official* or a duly authorized representative.

**Section 109**; add Sections 109.7, 109.8, 109.8.1, 109.9, and 109.10 to Section 109 to read as follows:

**109.7 Re-inspection fee.** A fee, as established by Plano city council resolution, may be charged when:

- 1. The inspection called for is not ready when the inspector arrives.
- 2. No building address or permit card is clearly posted.
- 3. City-approved plans are not on the job site available to the inspector.
- 4. The building is locked or work otherwise is not available for inspection when called.
- 5. The job site is red-tagged twice for the same item.
- 6. The original red tag has been removed from the job site.
- 7. There is a failure to maintain erosion control, trash control or tree protection.

Any re-inspection fees assessed shall be paid before any more inspections are made on that jobsite.

#### 109.8 Work without a permit.

**109.8.1 Investigation.** Whenever work for which a *permit* is required by this code has been commenced without first obtaining a *permit*, a special investigation shall be made before a *permit* may be issued for such work.

**109.9 Fee.** An investigation fee, in addition to the permit fee, shall be collected whether or nota *permit* is subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code or the city fee schedule, as applicable. The payment of such investigation fee shall not exempt the applicant from compliance with all other provisions of either this code or the technical codes nor from penalty prescribed by law.

**109.10 Unauthorized cover up fee.** Any work concealed without first obtaining the required inspection in violation of Section 110 shall be assessed a fee as established by the city fee schedule.

Section 110.3.6; Lath, gypsum board and gypsum panel product inspection; delete the exception.

**Section 111.2;** *change to read as follows:* 

**111.2 Certificate issued.** After the *building official* inspects the building or structure and does not find violations of this code or other laws that are enforced by the department, the *building official* shall issue a certificate of occupancy that contains the following:

- 1. The *permit* number.
- 2. The address of the structure.
- 3. [Item deleted.]
- 4. A description of that portion of the structure for which the certificate is issued.
- 5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code.
- 6. The name of the *building official*.
- 7. The edition of the code under which the *permit* was issued.
- 8. The use and occupancy, in accordance with the provisions of Chapter 3.
- 9. The type of construction as defined in Chapter 6.
- 10. The design occupant load.
- 11. Where an *automatic sprinkler system* is provided, whether the sprinkler system is required.
- 12. Any special stipulations and conditions of the building *permit*.

**Section 113;** change the title of the section and Section 113.1 to read as follows:

# SECTION 113 BUILDING STANDARDS COMMISSION

**113.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the *building official* relative to the application and interpretation of this code, there shall be and is hereby created a building standards commission ("commission," "board," or "board of appeals"). The commission shall be appointed by the Plano City Council and shall hold office at its pleasure. The commission 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 *building official*.

**Section 202;** *change the definition of "Ambulatory Care Facility" as follows:* 

**AMBULATORY CARE FACILITY.** Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided. This group may include, but not be limited to, the following:

- Dialysis centers
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

**Section 202;** add a definition of "Assisting Living Facilities" to read as follows:

**ASSISTED LIVING FACILITIES.** A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff.

**Section 202;** *change the definition of "High-Rise Building" to read as follows:* 

**HIGH-RISE BUILDING.** A building with an occupied floor located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

**Section 202;** *change the definition of "Repair Garage" to read as follows:* 

**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.

Section 202; change the definition of "Special Inspector" to read as follows:

**SPECIAL INSPECTOR**. A qualified person employed or retained by an *approved* agency who shall prove to the satisfaction of the registered design professional in responsible charge and the *building official* as having the competence necessary to inspect a particular type of construction requiring *special inspection*.

**Section 303.1.3;** *change to read as follows:* 

**303.1.3 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 304.1;** *add the following to the list of occupancies in Section 304.1 Business Group B:* 

Fire stations

Police stations with detention facilities for 5 or less

**Section 307.1.1;** *change Item 4 of Section 307.1.1 to read as follows:* 

4. 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 707 of 1-hour *horizontal assemblies* constructed in accordance with Section 711 or both. See also IFC Chapter 21, Dry Cleaning Plant provisions.

**Section 403.1;** *change to read as follows:* 

**403.1 Applicability.** *High-rise buildings* shall comply with Sections 403.2 through 403.6.

**Exceptions:** The provisions of Sections 403.2 through 403.6 shall not apply to the following buildings and structures:

- 1. Airport traffic control towers in accordance with Section 412.2.
- 2. *Open parking garages* in accordance with Section 406.5.
- 3. The open air portion of a building containing a Group A-5 occupancy in accordance with Section 303.6.
- 4. Special industrial occupancies in accordance with Section 503.1.1.
- 5. Buildings containing any one of the following:
  - 5.1 A Group H-1 occupancy.
  - 5.2 A Group H-2 occupancy in accordance with Section 415.8, 415.9.2, 415.9.3 or 426.1
  - 5.3 A Group H-3 occupancy in accordance with Section 415.8.

**Section 403.3;** *change to read as follows (Exception deleted):* 

**403.3 Automatic Sprinkler system.** Buildings and structures shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 403.3.3.

**Section 403.3.2;** *change to read as follows:* 

**403.3.2** Water supply to required fire pumps. In buildings that are more than 120 feet (36.5 m) in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

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

**Section 404.10;** *change to read as follows:* 

**404.10 Exit stairways in an atrium.** Where an atrium contains an exit access stairway, all the following shall be met:

- 1. The entry to the exit stairway is the edge of the closet riser of the exit stairway.
- 2. The entry of the exit stairway shall have access from a minimum of two directions.
- 3. The distance between the entry to an exit stairway in an atrium and the entrance to a minimum of one exit stairway enclosed in accordance with Section 1023.2 shall comply with the separation required by Section 1007.1.1.
- 4. Exit access travel distance shall be measured to the closet riser of the exit stairway.
- 5. Not more than 50 percent of the exit stairways shall be located in the same atrium.

**Section 406.3.3.1;** *change to read as follows:* 

**406.3.3.1 Carport separation.** A fire separation is not required between a Group R-2 and U carport provided that the carport is entirely open on all sides and that the distance between the two is at least 10 feet (3048 mm).

A separation is not required between any occupancy and an accessory U carport provided the carport is entirely open on all sides, the eave-to-eave or eave-to-property line (assumed or real) horizontal separation is at least 5 (five) feet, constructed of non-combustible materials and for the storage of automobiles.

Shade structures used for commercial playgrounds or commercial use do not require fire separations provided shading materials have flame-retardant certificates and framing members are of non-combustible construction.

**Section 423.5.1;** *change to read as follows:* 

**423.5.1 Required occupant capacity.** The required occupant capacity of the *storm shelter* shall include all of the buildings on the site and shall be the total occupant load of the classrooms, vocational rooms and offices in the Group E occupancy.

## **Exceptions:**

1. Where a new building is being added on an existing Group E site, and where the new building is not of sufficient size to accommodate the required occupant capacity of the *storm shelter* for all of the buildings on the site, the *storm shelter* 

- shall at a minimum accommodate the required occupant capacity for the new building.
- 2. Where approved by the *building official*, the required occupant capacity of the shelter shall be permitted to be reduced by the occupant capacity of any existing *storm shelters* on the site.
- 3. Where approved by the *building official*, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by *occupant load* calculation, shall be permitted to be used in the determination of the required design occupant capacity for the *storm shelter*.

**Section 502.1;** *change to read as follows:* 

**502.1 Address identification.** Approved numerals of minimum six (6) inches in height and of a color contrasting with the background designating address shall be placed on all new and existing buildings or structures 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 six (6) inch in height building numerals or address and three (3) inch in 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 twenty (20) inch by thirty (30) inch background or border.

**Section 503.1;** *change to read as follows:* 

**503.1 General.** Unless otherwise specifically modified in Chapter 4 and this chapter, *building height*, number of *stories* and *building area* shall not exceed the limits specified in Sections 504 and 506 based on the type of construction as determined by Section 602 and the occupancies as determined by Section 302 except as modified hereafter. *Building height*, number of *stories* and *building area* provisions shall be applied independently. For the purposes of determining area limitations, height limitations and type of construction, each portion of a building separated by one or more *fire walls* complying with Section 706 shall be considered to be a separate building. Where a building contains more than one distinct type of construction, the building shall comply with the more restrictive *building area*, *height*, and *stories* for the lesser type of construction or be separated by *fire walls*, except as allowed in Section 510.

**Table 506.2;** *delete footnote "i" from the table.* 

**Section 506.3.1;** *change to read as follows:* 

**506.3.1 Minimum percentage of perimeter**. To qualify for an area factor increase based on frontage, a building shall have not less than 25 percent of it perimeter on a *public way* or open space. Such open space shall be either on the same lot or dedicated for public use and shall be accessed from a street or approved *fire lane*. In order to be considered as accessible, if not in direct contact with a street or *fire lane*, a minimum 10-foot wide pathway meeting fire department access from the street or approved *fire lane* shall be provided.

**Section 602.1.1;** *change to read as follows:* 

**602.1.1 Minimum requirements.** A building or portion thereof shall not be required to conform to the details of a type of construction higher than that type which meets the minimum requirements based on occupancy even though certain features of such a building actually conform to a higher type of construction.

Where a building contains more than one distinct type of construction, the building shall comply with the most restrictive *building area*, *height*, and *stories*, for the lesser type of construction or be separated by *fire walls* in accordance with Section 706.

**Section 708.4.2;** change Exception 1 to read as follows (remainder of section and exceptions are unchanged):

1. Buildings equipped with an *automatic sprinkler system* installed throughout in accordance with Section 903.3.1.1, or in accordance with Section 903.3.1.2 provided that protection is provided in the space between the top of the *fire partition* and underside of the floor or roof sheathing, deck or slab above as required for systems complying with Section 903.3.1.1. Portions of buildings containing concealed spaces filled with noncombustible insulation, as permitted for sprinkler omission, shall not apply to this exception for draftstopping.

**Section 718.3**; change Exception to read as follows (remainder of section is unchanged):

**Exceptions:** Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 and provided that in combustible construction, sprinkler protection is provided in the floor space.

**Section 718.4;** *change Exception to read as follows (remainder of section is unchanged):* 

**Exceptions:** Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 and provided that in combustible construction, sprinkler protection is provided in the attic space.

**Section 901.5;** *change to read as follows:* 

**901.5** Acceptance tests. Fire protection systems shall be tested in accordance with the requirements of this code and the International Fire Code. Where required, the tests shall be conducted in the presence of the building official. Where the International Fire Code requires 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. Tests required by this code, the International Fire Code and the standards listed in this code shall be conducted at the expense of the owner or the owner's authorized agent. It shall be unlawful to occupy portions of a structure until the required fire protection systems within that portion of the structure have been tested and approved.

**Section 901.7;** *re-title and change to read as follows:* 

**901.7 Systems out of service.** Where a required *fire protection system* is out of service, or in the event of an excessive number of activations, 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.

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

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

**Section 903.2;** *change the section to read as follows and delete the Exception:* 

**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 systems* shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoist ways. Storage shall not be allowed within the elevator machine room.

**Section 903.2.1.1;** *change to read as follows:* 

**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 (557.4 m<sup>2</sup>).
- 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.

**Section 903.2.1.3;** *change to read as follows:* 

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

- 1. The *fire area* exceeds 6,000 square feet (557.4 m2).
- 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.

**Section 903.2.1.4;** *change to read as follows:* 

**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 (557.4 m<sup>2</sup>).
- 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*.

**Section 903.2.3;** *change to read as follows:* 

- **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 (557.4 m<sup>2</sup>) 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.

**Section 903.2.4;** *change to read as follows:* 

- **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 (557.4m<sup>2</sup>);
  - 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 (2230 m<sup>2</sup>).

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

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

**Section 903.2.7;** *change to read as follows:* 

- **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 (557.4 m<sup>2</sup>);
  - 2. Where a Group M fire area is located more than three stories above grade plane; or

3. Where the combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m<sup>2</sup>).

**Section 903.2.9;** *change to read as follows:* 

- **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 (557.4 m<sup>2</sup>);
  - 2. A Group S-1 *fire area* is located more than three stories above grade plane; or
  - 3. The combined area of all Group S-1 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m<sup>2</sup>).
  - 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 (464 m<sup>2</sup>).

**Section 903.2.9.1;** *change to read as follows:* 

- **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 (557.4 m<sup>2</sup>);
  - 2. One-story buildings with a *fire area* containing a *repair garage* exceeding 6,000 square feet (557.4 m<sup>2</sup>);
  - 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 (464 m<sup>2</sup>).

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

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

**Section 903.2.9.4**; *delete the Exception.* 

**Section 903.2.9.5**; add a new section to Section 903.2.9 to read as follows:

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

**Section 903.2.10;** *change to read as follows:* 

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

- 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 m<sup>2</sup>).
- 4. Where two or more sides of the garage are not accessible by the Fire Department ladder truck.

**Section 903.2.11;** change Section 903.2.11.3 (and delete the Exception) and add new Sections 903.2.11.7, 903.2.11.8, 903.2.11.9, 903.2.11.10 and 903.2.11.11 to read as follows:

- **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, other than penthouses in compliance with Section 1511 of the *International Building Code*, located 35 feet (10 668 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.
- **903.2.11.7 High-piled combustible storage.** For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 of the IFC to determine if those provisions apply.
- **903.2.11.8 Spray booths and rooms.** New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.
- **903.2.11.9 Buildings over 6,000 square feet.** An *automatic sprinkler system* shall be installed throughout all buildings with a building area 6,000 square feet or greater, in all existing buildings that are enlarged to be 6,000 square feet or greater, and in all existing 6,000 square foot buildings that 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 Building 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.
- **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.
- **903.2.11.11 Existing R occupancies.** In R occupancies where fire has occurred and displaces one or more occupants, the affected building shall be fire-sprinklered prior to re-occupancy of the unit/building.

## **Section 903.3.1.1.1;** *change to read as follows:*

- **903.3.1.1.1 Exempt locations.** When approved by the *fire code official*, automatic sprinklers shall not be required in the following rooms or areas where such 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.

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

- **903.3.1.2 NFPA 13R sprinkler systems.** *Automatic sprinkler systems* in Group R occupancies shall be permitted to be installed throughout in accordance with NFPA 13R where the Group R occupancy meets all of the following conditions:
  - 1. Four stories or less above grade plane.
  - 2. The floor level of the highest story is 35 feet (10668 mm) or less above the lowest level of fire department vehicle access.

3. The floor level of the lowest story is 35 feet (10668 mm) or less below the lowest level of fire department vehicle access.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 shall be measured from grade plane.

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 protection in combustible attics of buildings two (2) or more stories in height.

**Section 903.3.1.**; add new Sections 903.3.1.4, 903.3.1.4.1, 903.3.1.4.2 and 903.3.1.5 to read as follows:

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

**903.3.1.4.1 Attics.** Only dry-pipe, preaction, or listed anti-freeze *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 buildings;
- 2. Adequate heat is 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.

**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 serving more than 500 GPM shall be provided with one 5-inch Storz connection and one 2-1/2 inch connection. For system demands greater than 150 psi, an additional 2½ 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 sprinklered 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.

**Section 903.3.5**; change section to read as follows (Sections 903.3.5.1 and 903.3.5.2 to remain unchanged):

**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 *International Plumbing Code*. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official.

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

**Section 903.4;** change by adding a paragraph after the Exceptions to read as follows:

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

**Section 903.4.2;** *change to read as follows:* 

**903.4.2 Alarms.** An approved audible device, located on the exterior of the building in an approved location, shall be connected to each *automatic sprinkler system*. Such sprinkler waterflow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the *automatic sprinkler system* shall actuate the building fire alarm system.

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

**Section 903.4.3;** *change to read as follows:* 

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

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

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

**Section 905.3.2 Group A;** *delete Exceptions 1 and 2.* 

**Section 905.3.4 Stages;** *delete this section in its entirety.* 

**Section 905.3;** add a new section 905.3.9 to read as follows:

**905.3.9 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.

**Section 905.4;** *change 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 *exit stairway*, a hose connection shall be provided for each story above and below *grade plane*. Hose connections shall be located at the main floor landing unless otherwise *approved* by the fire code official.

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

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

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

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

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

- 4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit *passageway* or exit *corridor* to the mall. In *open mall buildings*, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit *passageway* or *exit* corridor to the mall.
- 5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way hose connection located to serve the roof or at the highest landing of an *exit stairway* with stair access to the roof provided in accordance with Section 1011.12.
- 6. Where the most remote portion of a nonsprinklered floor or *story* is more than 150 feet (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or *story* is more than 200 feet (60 960 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in *approved* locations.
- 7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred foot (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

Section 905.5 Location of Class II standpipe hose connections; delete this section in its entirety.

Section 905.6 Location of Class III standpipe hose connections; delete this section in its entirety.

**Section 905.9;** *change 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 be transmitted to the control unit.

## **Exception:**

- 1. Valves to underground key or hub valves in roadway boxes 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 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.

**Section 905.11;** *change to read as follows:* 

**905.11 Locking standpipe outlet caps.** The *fire code official* is authorized to require locking caps on the outlets on standpoints where the responding fire department carries key wrenches for the removal that are compatible with locking FDC connection caps. Locking caps are required on all new systems and existing systems where caps are missing.

**Section 906.1(1);** *change by deleting Exception 3 in its entirety.* 

**Section 907.1;** change Section 907.1.1 and add a new Section 907.1.4 to read as follows:

**907.1.1 Construction documents.** *Construction documents* for fire alarm systems shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code, the *International Fire Code*, and any relevant laws, ordinances, rules and regulations, as determined by the fire code official. Plans for fire alarm systems shall be in accordance with Plano Fire Department Fire Alarm Submittal Guidelines.

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

**Exception:** Existing fire alarm 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 remodels or expansions exceed 50% of the building, the fire alarm system must comply with these regulations within 18 months of permit application.

**Sec. 907.2.1;** change to read as follows:

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

**Exception:** 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.

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

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

## **Exceptions:**

- 1. A manual fire alarm system is not required in Group E occupancies with an *occupant* load of 50 or less.
- 1.1 Residential in-home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 ½ or less years of age, see Section 907.2.6.)

[Exceptions 2 through 4 remain unchanged.]

**Section 907.2.6;** add a new Section 907.2.6.4 to read as follows:

**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.

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

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

**Exception:** 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.

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

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

**Section 907.4.2;** add a new Section 907.4.2.7 to read as follows:

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

**Section 907.5.2;** add a new Section 907.5.2.4 to read as follows:

**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 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 areas of the occupancy shall be identified on the plans for review.

**Section 907.6.1;** add a new Section 907.6.1.1 to read as follows:

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

**Section 907.6.3;** *change by deleting all four Exceptions.* 

**Section 907.6.5**; add new Sections 907.6.5.1 and 907.6.5.2 to read as follows:

**907.6.5.1 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.

**907.6.5.2 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 910.2;** *add a new Section 910.2.3 with exceptions to read as follows:* 

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

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

**Exception:** Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of building 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.

**Section 912.2;** add a new Section 912.2.3 to read as follows:

**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.

**Section 912.4.1;** *change to read as follows:* 

**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 913.2.1;** *change to read as follows:* 

**913.2.1 Protection of fire pump rooms.** Fire pumps shall be located in rooms that are separated from all other areas of the building by 2-hour fire barriers constructed in accordance with Section 707 or 2-hour horizontal assemblies constructed in accordance with Section 711, or both. When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 feet in width and 6 feet - 8 inches in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1 of the *International Fire Code*.

## **Exception:**

- 1. In other than high-rise buildings, separation by 1-hour *fire barriers* constructed in accordance with Section 707 or 1-hour *horizontal assemblies* constructed in accordance with Section 711, or both, shall be permitted in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. Separation is not required for fire pumps physically separated in accordance with NFPA 20.
- 3. 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 of the *International Fire Code*.

**Section 913.4;** *change to read as follows:* 

**913.4 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 1006.2.1;** *change Exception 3 to read as follows:* 

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

**Section 1006.2.2;** add a new Section 1006.2.2.7 to read as follows:

**1006.2.2.7 Electrical Rooms.** For electrical rooms, special exiting requirements may apply. Reference the electrical code, as adopted.

**Section 1009.1;** *add a new Exception 3 to read as follows:* 

3. Buildings regulated under state law and built in accordance with state-registered plans, including variances or waivers granted by the State of Texas, shall be deemed to be in compliance with the requirements of Section 1009 and Chapter 11.

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

7. Buildings regulated under state law and built in accordance with state-registered plans, including variances or waivers granted by the State of Texas, shall be deemed to be in compliance with the requirements of Section 1009 and Chapter 11.

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

- 3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, M or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf. The inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.
- 4. Where a pair of doors serves a Group A, B, F, M or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf provided that such inactive leaf is not needed to meet egress capacity requirements and the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. The inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.

## **Section 1015.8;** *change to read as follows:*

**1015.8 Window openings.** Windows in Group R-2 and R-3 buildings including *dwellings units*, where the bottom of the clear opening of an operable window is located less than 36 inches (914 mm) above the finished floor and more than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, shall comply with one of the following:

- 1. Operable windows where the top of the sill of the opening is located more than 55 feet (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F2006.
- 2. Operable windows where the openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the window is in its largest opened position.
- 3. Operable windows where the openings are provided with window fall prevention devices that comply with ASTM F2090.
- 4. Operable windows that are provided with window opening control devices that comply with Section 1015.8.1.

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

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

**Section 1101.1;** *change to read as follows:* 

**1101.1 Scope.** The provisions of this chapter shall control the design and construction of facilities for accessibility for individuals with disabilities.

**Exception:** Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation or regulated by and in compliance with the Fair Housing Act and Design Manual shall be deemed to be in compliancewith the requirements of this chapter.

Section 1106 Parking and Passenger Loading Facilities; delete this section in its entirety.

**Section 1202.1;** *change to read as follows:* 

**1202.1 General.** Buildings shall be provided with natural ventilation in accordance with Section 1202.5, or mechanical ventilation in accordance with the *International Mechanical Code*.

Where the air infiltration rate in a *dwelling unit* is 5 air changes or less per hour when tested with a blower door at a pressure 0.2 inch w.c. (50 Pa) in accordance with Section 402.4.1.2 of the *International Energy Conservation Code*, the *dwelling unit* shall be ventilated by mechanical means in accordance with Section 403 of the *International Mechanical Code*.

**Table 1505.1;** change Table 1505.1 to revise footnote b and delete footnote c to read as follows:

- b. Non-classified roof coverings shall be permitted on buildings of U occupancies having not more than 120 sq. ft. of protected roof area. When exceeding 120 sq. ft. of protected roof area, buildings of U occupancies may use non-rated non-combustible roof coverings.
- c. [deleted]

**Section 1603.2;** *add chart to read as follows:* 

GROUND SNOW LOAD	WIND DESIGN			SEISMIC DESIGN CATEGORY <sup>f</sup>	SUBJECT TO DAMAGE FROM				RRIER «T <sup>h</sup>	<sub>8</sub> S(	J.		
5 lb/ft	SPEED <sup>d</sup> (MPH)	Topographic Effects <sup>k</sup>	Special Wind Region <sup>L</sup>	Windborne Debris Zone <sup>m</sup>	A	Weathering a	Frost Line Depth <sup>b</sup>	Termite <sup>C</sup>	WINTER DESIGN TEMP <sup>e</sup>	ICE BARRI UNDER- LAYMENT <sup>h</sup>	FLOOD HAZARD	AIR FREEZING INDEX <sup>i</sup>	MEAN ANNUAL TEMPj
	115 (3 secgust)/76 fastest mile	No	No	No No		Moderate	6"	Very Heavy	22ºF	No	Local Code	150	64.9 <sup>o</sup> F

Footnotes reference Table R301.2(1) – IRC

**Section 1704.2.5.1;** *change to read as follows:* 

**1704.2.5.1 Fabricator approval.** *Special inspections* during fabrication are not required where the work is done on the premises of a fabricator *approved* to perform such work without *special* 

inspection. Approval shall be based on review of the fabricator's written fabrication procedures and quality control practices approved by the building official. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the owner or the owner's authorized agent for submittal to the building official as specified in Section 1704.5 stating that the work was performed in accordance with the approved construction documents.

Section 1809.5.1 Frost protection at required exits; delete section in its entirety.

**Section 2702;** *change Section 2702 to add a new Section 2702.5 to read as follows:* 

**2702.5 Designated critical operations areas (DCOA).** In areas within a facility or site requiring continuous operation for the purpose of public safety, emergency management, national security or business continuity, the power system shall comply with NFPA 70 Article 708.

**Section 2901.1;** *change to read as follows:* 

[P] 2901.1 Scope. The provisions of this chapter and the *International Plumbing Code* shall govern the design, construction, erection and installation of plumbing components, appliances, equipment and systems used in *buildings* and structures covered by this code. Toilet and bathing rooms shall be constructed in accordance with Section 1210. Private sewage disposal systems shall conform to the *International Private Sewage Disposal Code*. The *International Fire Code*, the *International Property Maintenance Code* and the *International Plumbing Code* shall govern the use and maintenance of plumbing components, appliances, equipment and systems, The *International Existing Building Code* and the *International Plumbing Code* shall govern the alteration, *repair*, relocation, replacement and *addition* of plumbing components, *appliances*, *equipment* and systems. The provisions of this chapter are meant to work in coordination with the provisions of Chapter 4 of the *International Plumbing Code*. Should any conflicts arise between the two chapters, the *building official* shall determine which provision applies.

**Section 2902.1;** *change to read as follows:* 

**2902.1 Minimum number of fixtures.** Plumbing fixtures shall be provided in the minimum number as shown in Table 2902.1 based on the actual use of the building or space. Uses not shown in Table 2902.1 shall be considered individually by the code official. The number of occupants shall be determined by this code. In other than E occupancies, the minimum number of fixtures in Table 2902.1 may be lowered, if requested in writing, by the applicant stating reasons for a reduced number and approved by the *building official*.

**Table 2902.1;** *change table to add a footnote g to read as follows:* 

TABLE 2902.1 - MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES

NO.	CLASSIFICATION	DESCRIPTION	WATER CLOSETS (URINALS: SEE SECTION 424.2)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAINS (SEE	OTHER
			MALE	FEMALE	MALE	FEMALE	SHOWERS	SECTION 410)	
2	Business <sup>g</sup>	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, ambulatory care, light industrial and similar uses		1 per 50 for emainder	1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80		-	1 per 100 <sup>g</sup>	1 service sink <sup>e</sup>
6	Mercantile <sup>g</sup>	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500		1 per 750		-	1 per 1,000 <sup>g</sup>	1 service sink <sup>e</sup>

g. Drinking fountains are not required in M occupancies with an occupant load of 100 or less, B occupancies with an occupant load of 25 or less, where drinking water is provided in a container free of charge.

**Section 2902.1**; add new Sections 2902.1.4, 2902.1.4.1, and 2902.1.4.2 to Section 2902.1 to read as follows:

**2902.1.4 Additional fixtures for food preparation facilities.** In addition to the fixtures required in this chapter, all food service facilities shall be provided with additional fixtures set out in this section.

**2902.1.4.1 Hand washing lavatory.** At least one hand washing lavatory shall be provided for use by employees that is accessible from food preparation, food dispensing and ware washing areas. Additional hand washing lavatories may be required based on convenience of use by employees.

**2902.1.4.2 Service sink.** In new or remodeled food service establishments, at least one service sink or one floor sink shall be provided so that it is conveniently located for the cleaning of mops or similar wet floor cleaning tool and for the disposal of mop water and similar liquid waste. The location of the service sink(s) and/or mop sink(s) shall be approved by the City of Plano Health Department.

**Section 3002.1;** *change to read as follows:* 

**3002.1 Hoistway enclosure protection.** Elevator, dumbwaiter and other hoistway enclosures shall be shaft enclosures complying with Sections 712 and 713.

#### **Exceptions:**

- 1. Elevators completely located within atriums shall not require hoistway enclosure protection.
- 2. Elevators in open or enclosed parking garages that serve only the parking garage, shall not require hoistway enclosure protection.

**Section 3005.4;** *change to read as follows:* 

**3005.4** Machine rooms, control rooms, machinery spaces and control spaces. The following rooms and spaces shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both:

- 1. Machine rooms.
- 2. Control rooms.
- 3. Control spaces.
- 4. Machinery spaces outside of the hoistway enclosure.

The fire-resistance shall be not less than the required rating of the hoistway enclosure served by the machinery. Openings in the fire barriers shall be protected with assemblies having a fire protection rating of not less than that required for the hoistway enclosure doors.

## **Exceptions:**

- 1. Elevator machine rooms, control rooms, machinery spaces and control spaces completely located within atriums shall not require enclosure protection.
- 2. Elevator machine rooms, control rooms, machinery spaces and control spaces in open or enclosed parking garages that serve only the parking garage, shall not require enclosure protection.

**Section 3005.5;** change section by adding new Subsections 3005.5.1, 3005.5.1.1, 3005.5.1.1.1, 3005.5.1.2, and 3005.5.1.3 to read as follows:

# 3005.5.1 Fire protection in machine rooms, control rooms, machinery spaces and control spaces.

- **3005.5.1.1 Automatic sprinkler system.** The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, except as otherwise permitted by Section 903.3.1.1.1 and as prohibited by Section 3005.5.1.1.1.
  - **3005.5.1.1.1 Prohibited locations.** Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces and elevator hoistways.
  - **3005.5.1.1.2 Sprinkler system monitoring.** The sprinkler system shall have a sprinkler control valve supervisory switch and water-flow initiating device provided for each floor that is monitored by the building's fire alarm system.

**3005.5.1.2** Water protection. An approved method to prevent water from infiltrating into the hoistway enclosure from the operation of the automatic sprinkler system outside the elevator lobby shall be provided.

**3005.5.1.3 Shunt trip.** Means for elevator shutdown in accordance with Section 3005.5 shall not be installed.

**Section 3005;** *add a new Section 3005.7 to read as follows:* 

**3005.7 Storage.** Storage shall not be allowed within the elevator machine room, control room, machinery spaces and or control spaces. Provide approved signage at each entry to the above-listed locations stating: "No Storage Allowed."

**Section 3006.2;** *change to read as follows:* 

**3006.2 Hoistway opening protection required.** Elevator hoistway door openings shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three *stories*, is required to be enclosed within a *shaft enclosure* in accordance with Section 712.1.1 and any of the following conditions apply:

- 1. The building is not protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. The building contains a Group I-1, Condition 2 occupancy.
- 3. The building contains a Group I-2 occupancy.
- 4. The building contains a Group I-3 occupancy.
- 5. The building is a high rise and the elevator hoistway is more than 55 feet (16 764 mm) in height. The height of the hoistway shall be measured from the lowest floor at or above grade to the highest floors served by the hoistway.

**Section 3007.3;** *change to read as follows:* 

**3007.3 Water protection.** Water from the operation of an automatic sprinkler system outside the lobby shall be prevented from infiltrating into the hoistway enclosure in accordance with an approved method.

**Section 3008.3;** *change to read as follows:* 

**3008.3 Water protection.** Water from the operation of an automatic sprinkler system outside the lobby shall be prevented from infiltrating into the hoistway enclosure in accordance with an approved method."

**Section III.** All provisions of the Code of Ordinances of the City of Plano in conflict with the provisions of this Ordinance are hereby repealed, and all other provisions of the Code of Ordinances of the City of Plano, not in conflict with the provisions of 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 thereof, 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.** Any violation of the provisions or terms of this ordinance by any person, firm or corporation shall be a misdemeanor offense and shall be subject to a fine in accordance with Section l-4(a) of the City Code of Ordinances for each offense. Every day a violation continues shall constitute a separate offense.

**Section VII.** This Ordinance shall become effective February 1, 2022 and after its passage and publication as required by law.

**DULY PASSED AND APPROVED** this, the 24<sup>th</sup> day of January, 2022.

	John B. Muns, MAYOR
ATTEST:	
Lisa C. Henderson, CITY SECRETARY	
APPROVED AS TO FORM:	
Paige Mims, CITY ATTORNEY	