Amendments and deletions to the 2015 Edition of the International Building Code

Section 1.01 Title

This Chapter shall be known as the "Construction" Chapter of the Arlington City Code. Article I shall be known as the "Building Code" of the City of Arlington and shall incorporate the herein referenced and adopted Editions of the International Code, as published by the International Code Council, Inc.

Section 1.02 Adoption of Code

The International Building Code, 2015 Edition (hereinafter called "I.B.C."); the International Existing Building Code, 2015 Edition (hereinafter called "I.E.B.C."); the International Residential Code, 2015 Edition (hereinafter called "I.R.C."); and the International Energy Conservation Code, 2015 Edition (hereinafter called "I.E.C.C."); as published by the International Code Council, Inc. are hereby adopted and designated, together with the deletions, amendments and addenda hereinafter contained, as the Building Code of the City of Arlington, the same as though said I.B.C., I.E.B.C., I.R.C. and I.E.C.C. were copied at length herein. Copies of the I.B.C., I.E.B.C., I.R.C. and I.E.C.C. and their Appendices shall be kept on file in the Office of the City Secretary.

The adoption of the 2015 I.R.C. as stated herein except that Section R313 of the 2003 I.R.C., as amended and originally adopted on August 23, 2005 by Ordinance No. 05-068, to read as follows is maintained:

R313.1 Fire sprinkler system. All R3 and U occupancies are required to have an approved fire sprinkler system.

Exception: Buildings with an approved fire department access.

Section 1.03 Code Defined; Rule of Construction

This Building Code shall include all of the provisions of the I.B.C., I.E.B.C., I.R.C. and I.E.C.C. as adopted by Section 1.02 above and all other provisions contained herein. In the event a conflict is determined to exist between said I.B.C., I.E.B.C., I.R.C. and I.E.C.C. as adopted and the other provisions of this Chapter, the provisions of this Chapter control. Items regulated by permit located on residential lots that are not specifically referenced in the I.R.C. are regulated by the I.B.C or I.E.B.C.

Section 1.04 <u>Amendments</u>, <u>Additions and Deletions</u>

The adoption of the I.B.C, I.E.B.C., I.R.C. and I.E.C.C., as provided in Section 1.02 above, is modified and amended by the following:

- A. The addition thereto of Articles II, et seq., of this Chapter.
- B. The deletion in the entirety of the following provisions of the I.B.C., I.E.B.C., I.E.C.C., and I.R.C.:
 - 1. Sections 105 I.B.C., 105 I.E.B.C and 105 I.R.C., entitled **Permits**;
 - 2. Section 107 I.B.C. entitled **Submittal Documents**, Section 106 I.E.B.C. entitled **Construction Documents** and Section 106 I.R.C. entitled **Construction Documents**.
 - 3. Sections 109 I.B.C., 108 I.E.B.C., 108 I.R.C. and 107 I.E.C.C, entitled **Fees**:
 - 4. Sections 110 I.B.C., 109 I.E.B.C. and 109 I.R.C., entitled Inspections;
 - 5. Sections 111 I.B.C., 110 I.E.B.C. and 110 I.R.C., entitled **Certificate** of **Occupancy**:
 - 6. Sections 113 I.B.C., 112 I.E.B.C., 112 I.R.C. and 109 I.E.C.C, entitled **Board of Appeals**;
 - 7. Sections 114 I.B.C., 113 I.E.B.C. and 113 I.R.C., entitled **Violations**;
 - 8. Sections 116 I.B.C. and 115 I.E.B.C. entitled **Unsafe Structures** and **Equipment**;
 - 9. Section 2503 I.B.C., entitled **Inspection**;
 - 10. and all of Chapters 34 through 43 of the I.R.C.
- C. The amendment of the following I.B.C. provisions:
 - 1. The amendment of Section 101.1, entitled **Title**, to read as follows:
 - **101.1 Title.** These regulations shall be known as the Building Codes of the City of Arlington, Texas, hereinafter referred to as "this code."
 - 2. The amendment of the Exceptions to Section 101.2, entitled **Scope**, to read as follows:

Exceptions:

- 1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the International Residential Code.
- 2. Portable and/or temporary storage buildings not exceeding three hundred twenty (320) square feet in area shall not be

subject to the provisions of this Building Code for foundations and framing provided:

- (a) The building shall not be intended or used for human occupancy;
- (b) No plumbing and/or mechanical improvements shall be permitted and any electrical improvements are supervised by permits and work shall be installed in full compliance with the appropriate Chapter of the Code of the City of Arlington for such work; and
- (c) A permit for such building shall have been obtained from the Building Official.
- 3. The amendment of Section 101.4, entitled **Referenced codes**, to read as follows:
 - **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.
- 4. The amendment of Section 101.4, entitled **Referenced codes**, to add a new section 101.4.8, entitled **Electrical**, to read as follows:
 - **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.
- 5. The amendment of Section 103 and 103.1 to read as follows:

SECTION 103 DIVISION OF BUILDING INSPECTIONS

103.1 Creation of enforcement agency. The Division of Building Inspections is hereby created and the official in charge thereof shall be known as the Building Official.

- 6. The amendment of Section 104.6, entitled **Right of Entry**, to read as follows:
 - **104.6 Right of Entry.** Where it is necessary to make an inspection to enforce any of the provisions of this Building Code, or whenever the Building Official or an authorized representative has reasonable cause to believe that there exists in any building or upon any premises any condition or violation which makes such building or premises unsafe, dangerous or hazardous, the Building Official or an authorized representative may enter such building or premises at all reasonable times to inspect the same or to perform any duty imposed upon said Building Official by this Building Code. If such building or premises is occupied, the Building Official or an authorized representative shall first present credentials and request entry. If such building or premises is unoccupied, the Building Official shall first make a reasonable effort to locate the owner or other person having charge or control of the building or premises and request entry. If such entry is refused, or, if no owner or other person having charge or control of the building or premises can be located, the Building Official or an authorized representative shall have recourse to every remedy provided by law to secure entry.
- 7. The deletion of Section 104.10.1, entitled **Flood Hazard Areas**, in its entirety.
- 8. The addition of Section 104.12, entitled **Occupancy Violations**, to read as follows:
 - **104.12 Occupancy Violations.** Whenever any building, structure, or equipment therein which is regulated by this Building Code is being used contrary to the provisions of said Code, the Building Official or an authorized representative may order that such use be discontinued and/or that the building or structure, or a portion thereof, be vacated by written notice served on any person who is causing such use to be continued. Further, the Building Official or an authorized representative may order the evacuation of any building or premises, or a portion thereof, which constitutes a dangerous building as defined in Article XVI of this Chapter.

Notice to stop use shall be given by personal delivery or by certified mail, return receipt requested, to the person responsible for the continued use. Such person shall discontinue the use within the time prescribed by the Building Official after receipt of such notice and shall not resume the use of the building or premises until first rendering the same in compliance with this Building Code.

Notice to vacate a dangerous building or premises shall be posted at or upon each exit of the said structure affected thereby, and shall be in substantially the following form:

"DO NOT ENTER UNSAFE TO OCCUPY

It is a misdemeanor to occupy this building, or to remove or deface this notice.

	Arlington Building Official	
(by)		
(date)_		
(compliance due date)		"

No person shall remain in or enter any building or premises which has been so posted, except that entry may be made to repair, demolish or remove the unsafe condition. Such entry or the destruction, defacing or removal of said notice prior to approval by the Building Official or an authorized representative shall be a violation of this Building Code.

9. The amendment of Section 115, entitled **STOP WORK ORDER**, to read as follows:

SECTION 115 STOP WORK ORDER

115.1 Stop Work Order. Whenever any work is being done contrary to the provisions of this Code, the Building Official may order the work stopped by notice in writing served on any persons engaged in the doing or causing such work to be done. Any such person shall forthwith stop such work until:

- a. He or she is authorized by the Building Official to proceed with the work; or
- b. An appeal perfected pursuant to Section 2.06 of Article II has resulted in a waiver of the condition causing the stop order, or a finding that there is no cause for a stop order. Failure to stop such work, in addition to penalties and remedies elsewhere set forth, shall void any appeal.

10. The amendment of Section 202, entitled **DEFINITIONS**, by amending the following definitions found therein to read 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 individuals who are rendered incapable of self-preservation. This group may include, but not necessarily be limited to, the following:

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

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.

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

BASE FLOOD ELEVATION. The elevation of the *base flood*, including wave height, relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the Flood Insurance Rate Map (FIRM) and found in the accompanying Flood Insurance Study (FIS) for Zones A, AE, AH, A1-A30, or AR that indicates the water surface elevation resulting from the flood that has a 1% chance of equaling or exceeding that level in any given year.

DESIGN FLOOD. The *flood* associated with the greater of the following two areas:

- Area that is subject to a 1-percent or greater chance of flooding in any year based upon fully urbanized land conditions.
- 2. Area designated as a *special flood hazard area* on a community's flood hazard map or otherwise adopted by resolution as a regulatory floodplain.

EXISTING CONSTRUCTION. Any buildings and structures for which the "start of construction" commenced before the effective date of the initial FIRM (December 31, 1974). "Existing construction" may also be referred to as "existing structures."

FLOOD HAZARD AREA. The greater of the following two areas:

- 1. Area that is subject to a 1-percent or greater chance of flooding in any year based upon fully urbanized land conditions.
- 2. Area designated as a *special flood hazard area* on a community's flood hazard map or otherwise adopted by resolution as a regulatory floodplain.

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 approved by the Building Official as having the competence necessary to inspect a particular type of construction requiring special inspection.

SUBSTANTIAL DAMAGE. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its beforedamaged condition would equal or exceed 25 percent of the market value of the structure one day before the damage occurred. Please refer to the definition of "SUBSTANTIAL IMPROVEMENT".

SUBSTANTIAL IMPROVEMENT. Any repair, reconstruction, rehabilitation, addition or improvement of a building or structure, the cost of which equals or exceeds 25 percent of the market value of the structure before the "start of construction" of the improvement. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

- 1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.
- 2. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.
- 11. The amendment of Section 202, entitled **DEFINITIONS**, by adding the following definitions to read as follows:

MULTI-UNIT RENTAL COMPLEX is two or more dwelling units in one or more buildings that are under common ownership, managed by the same owner, managing agent, or management company, and

located on the same lot or tract of land or adjacent lots or tracts of land. The term includes a condominium project. The term does not include:

- (A) A facility primarily renting rooms to overnight guests; or
- (B) A single-family home or adjacent single-family homes that are not part of a condominium project.

POOL DECK is a flat walking surface consisting of wood, stone, brick, concrete or other similar material located within five feet (5') of the water's edge of a swimming pool or spa.

PROPERTY OWNERS ASSOCIATION is an association of property owners for a residential subdivision, condominium, cooperative, townhouse project, or other project involving residential dwellings.

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.

SELF-CLOSING GATE is a gate, which closes or shuts automatically, without the aid of human, electrical, solar or battery power after being opened.

SELF-CLOSING AND SELF-LATCHING DEVICE is a device that causes a gate to automatically close and latch without human, electrical, solar or battery power.

SHALL, as it applies to an act or duty to be performed by the Building Official pursuant to any section of this Building Code, is discretionary. Its use in all other applications in this Code shall be mandatory.

12. The amendment of Section 202, entitled **DEFINITIONS**, by deleting the following definition:

FLOOD HAZARD AREA SUBJECT TO HIGH VELOCITY WAVE ACTION

13. The amendment of Section 303.1.3, entitled **Associated with Group E occupancies**, 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 Chapter 10 and 11.
- 14. The amendment of Section 304.1, entitled **Business Group B**, to read as follows:
 - **304.1 Business Group B.** Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers

Ambulatory health care facilities

Animal hospitals, kennels and pounds

Banks

Barber and beauty shops

Car wash

Civic administration

Clinic, outpatient

Dry cleaning and laundries; pick-up and delivery stations and selfservice

Educational occupancies above the 12th grade

Electronic data processing

Fire Stations

Laboratories; testing and research

Motor vehicle showrooms

Police stations with detention facilities for 5 or less

Post offices

Print shops

Professional services (architects, attorneys, dentists, physicians, engineers, etc.)

Radio and television stations

Restaurants with no dine-in facilities (take-out or delivery only)

Telephone exchanges

- 15. The amendment of Exception 4 to Section 307.1, entitled **High-hazard Group H**, 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, or 1-hour horizontal assemblies constructed in accordance with Section 711, or both. See also Chapter 21, Dry Cleaning Plant provision of the Fire Code.

- 16. The amendment of Section 310.5, entitled **Residential Group R**, more specifically the paragraphs entitled **R-3** to read as follows:
 - **R-3** Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4 or I, including:

Buildings that do not contain more than two dwelling units.

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

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

Congregate living facilities with 16 or fewer persons.

Adult care and child care facilities with five or fewer unrelated persons that are within a single-family home are permitted to comply with the International Residential Code.

- 17. The amendment of Section 311.2, entitled **Moderate-hazard** storage, Group S-1, to add the use classification "Self Service Storage Facility."
- 18. The amendment of Section 403.1, entitled **Applicability**, to amend Exception 3 to read as follows:
 - 3. The *open air* portion of a building containing a Group A-5 occupancy in accordance with Section 303.6.
- 19. The amendment of Section 403.3, entitled **Automatic sprinkler** system, by the deletion of Exception 2.
- 20. The amendment of Section 403.3.2, entitled **Water supply to required fire pumps**, 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.

- 21. The amendment of Section 404.5, entitled **Smoke control**, by the deletion of the Exception.
- 22. The amendment of Section 406.3.5.1, entitled **Carport separation**, to add a sentence to read as follows:
 - **406.3.5.1 Carport Separation.** A separation is not required between a Group R-3 and U carport, provided the carport is entirety open on two or more sides and there are not enclosed areas above. 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).
- 23. The amendment of the Exception to Section 411.4, entitled **Automatic sprinkler system**, to read as follows:

Exception: An automatic sprinkler system need not be provided for amusement buildings actually operating not more than thirty (30) consecutive days.

- 24. The amendment of Section 411.7.1, entitled **Photo luminescent** exit signs, to read as follows:
 - **411.7.1 Photo luminescent exit signs.** Photo luminescent exit signs are prohibited.
- 25. The amendment of Section 416.5 entitled **Fire protection**, to read as follows:
 - **416.5 Fire protection.** An automatic fire-extinguishing system shall be provided in all spray, dip and immersing spaces and storage rooms and shall be installed in accordance with Chapter 9 for both existing and new spray, dip and immersing spaces and storage rooms.
- 26. The amendment of Section 423.3, entitled **Critical Emergency Operations**, by deleting it in its entirety.

- 27. The amendment of Section 423.4, entitled **Group E occupancies**, to add Section 423.4.1 to read as follows:
 - **423.4.1 Group E occupancies.** In areas where the shelter design wind speed for tornados is 250 MPH in accordance with Figure 304.2(1) of ICC 500, all new buildings for Group E occupancies with an aggregate occupant load of 50 or more shall have a storm shelter constructed in accordance with ICC 500. The shelter shall be capable of housing the total occupant load of the Group occupancy.
- 28. The amendment of Section 506.3.2, entitled **Minimum frontage distance**, to add Section 506.3.2.1 to read as follows:
 - **506.3.2.1 Open space limits.** 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 an approved fire lane, a minimum ten (10) foot wide pathway adjoining fire department access from the street or approved fire lane shall be provided.
- 29. The amendment of Table 602, entitled **FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE**^{ae}, to insert footnote h. to the heading "OCCUPANCY GROUP A, B, E, F-2, I, Rh, S-2g, Ubh" to read as follows:
 - h. For one- and two-family dwellings and apartment buildings, open metal carport structures may be constructed within zero (0) feet of the property line without fire-resistive or opening protection when the location of such is approved as required by other City ordinances.
- 30. The amendment of Section 712.1.9, entitled **Two-story opening**, to change Item 4 to read as follows:
 - 4. Is not open to a corridor in Group I and H occupancies.
- 31. The amendment of Section 901.6.1, entitled **Automatic sprinkler** systems, to add Section 901.6.1.1 to read as follows:
 - **901.6.1.1 Standpipe Testing.** Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:
 - 1. The piping between the Fire Department Connection (FDC) and

the standpipe shall be backflushed when foreign material is present, and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.

- 2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the fire code official) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.
- 3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.
- 4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the fire code official.
- 5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.
- The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (fire code official) shall be followed.
- 7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.
- 8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.

- 9. Contact the fire code official for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the fire code official.
- 32. The amendment of Section 902.1, entitled **Definitions**, by the amendment of the definition of **STANDPIPE**, **TYPES OF**, under **Manual dry** as referenced in Section 202, to read as follows:
 - **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.
- 33. The amendment of Section 903.1.1, entitled **Alternative protection**, 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.
- 34. The amendment of Section 903.2, entitled **Where required**, to add the following 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 shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating "ELEVATOR MACHINERY NO STORAGE ALLOWED."
- 35. The amendment addition of Section 903.2.1, entitled **Group A**, to add a new Section 903.2.1.8 to read as follows:

903.2.1.8 Special amusement building. Special amusement buildings shall be equipped throughout with an automatic sprinkler system.

Exception: An automatic sprinkler system need not be provided when an amusement building shall be in existence less than 30 days and when the construction and use is approved by the Fire Code Official or authorized representative.

- 36. The amendment of Item 2 under Section 903.2.4, entitled **Group F-1**, to read as follows:
 - 2. A Group F-1 fire area is located more than two stories above grade plane.
- 37. The amendment of Section 903.2.9, entitled **Group S-1**, to add a new Section 903.2.9.3, to read as follows:
 - **903.2.9.3 Self-service storage facility**. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

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

- 38. The amendment of Section 903.2.11.3, entitled **Buildings 55 feet or more in height**, to read as follows and Exception 1 is deleted:
 - **903.2.11.3 Buildings over two stories in height**. An automatic sprinkler system shall be installed throughout buildings, other than penthouses in compliance with Section 1509 of the International Building Code, that is located 55 feet or more above the lowest level of fire department vehicle access.
- 39. The amendment of Section 903.2.11, entitled **Specific building** areas and hazards, to add a new Section 903.2.11.7 to read as follows:
 - **903.2.11.7 High-Piled Combustible Storage**. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 of the Fire Code to determine if those provisions apply.
- 40. The amendment of Section 903.2.11, entitled **Specific building** areas and hazards, to add a new Section 903.2.11.8 to read as follows:

- **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.
- 41. The amendment of Section 903.3.1.1.1, entitled **Exempt locations**, 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 admitted from a room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.
 - 1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
 - 2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the code official.
 - 3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
 - 4. {Deleted}
 - 5. Elevator machine rooms, machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.
 - 6. {Deleted}
- 42. The amendment of Section 903.3.1.2, entitled **NFPA 13R sprinkler systems**, to read as follows:
 - **903.3.1.2 NFPA 13R sprinkler system**. Required automatic sprinkler systems in Group R occupancies of four stories or less may be hydraulically calculated within the dwelling units in accordance with NFPA 13R and as amended by this code. Sprinkler protection shall be provided throughout, including the means of egress, patios, bathrooms, closets, balconies and attics.

Exceptions:

1. A fire department connection (FDC) is not required for one and two-family dwellings.

- 2. A required system for one and two-family dwellings may be hydraulically calculated using the standard for a 13D sprinkler system.
- A required system for one and two-family dwellings may use materials that meet the standard for a 13D sprinkler system.
- 43. The amendment of Section 903.3.1.2, entitled **NFPA 13R sprinkler** systems, to add a new Section 903.3.1.2.3, entitled **Attics and Attached Garages**, to read as follows:
 - **Section 903.3.1.2.3 Attics and Attached Garages.** Sprinkler protection is required in attic spaces of such buildings two or more stories in height, in accordance with NFPA 13 and or NFPA 13R requirements, and in attached garages.
- 44. The amendment of Section 903.3.1.3, entitled **NFPA 13D sprinkler systems**, to read as follows:
 - **903.3.1.3 NFPA 13D sprinkler systems.** Non-required automatic sprinkler systems in one and two-family dwellings and manufactured homes may be installed in accordance with NFPA 13D or in accordance with state law.
- 45. The amendment of Section 903.3.5, entitled **Water supplies**, to add a second paragraph to read as follows:
 - Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10-psi safety factor. Reference Section 507.4 for additional design requirements.
- 46. The amendment of Section 903.3.7, entitled **Fire department connections**, to read as follows:
 - **903.3.7** Fire department connections. The location of fire department connections shall be approved by the Fire Code Official. All fire department connections in the City of Arlington shall be 4" Storz connections. The permanent Storz adapter shall be constructed of high strength, light weight, corrosion resistant aluminum alloy capable of being securely attached to standpipe/sprinkler outlets designed for fire department Storz connections. The Storz lug connection shall conform to industry standards. The hose sealing surface shall consist of a machined metal seat to eliminate rubber gaskets, coated to protect against long

term exposure to the environment. The Storz connection shall connect to the pipe outlet using National Standard Thread. The connection shall be angled downward at a 30° angle. A semi-permanent ¼" mesh screen shall be provided inside the Storz adapter, constructed of corrosion resistant metal. A 4" Storz aluminum cap with chain or cable shall be provided for the fire department connection. For each additional 1500 G.P.M. required or fraction thereof an additional 4" Storz connection is required.

47. The amendment of Section 903.4, entitled **Sprinkler system** supervision and alarms, to read as follows:

903.4 Sprinkler system supervision and alarms. All valves controlling the water supply for automatic sprinkler systems and water-flow switches on all sprinkler systems shall be electrically supervised and monitored by a UL listed Central Station. The fire-pump system shall also be supervised and monitored for "power available," "phase reversal" and "pump running" conditions on distinct circuits.

Exceptions:

- 1. Automatic sprinkler systems protecting one-and two-family dwellings.
- 2. Limited area systems serving fewer than 20 sprinklers.
- 3. Jockey pump control valves that are sealed or locked in the open position.

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

48. The amendment of Section 903.4.2, entitled **Alarms**, to add a second paragraph to read as follows:

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.

49. The amendment of Section 903.4.3, entitled **Floor control valves**, to read as follows:

- **903.4.3 Floor control valves.** 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.
- 50. The addition of Section 903.6., entitled **Spray booths and rooms**, to read as follows:
 - **903.6. Spray booths and rooms.** New and existing spray booths and spray rooms shall be protected by an approved automatic fire extinguishing system in accordance with Section 1504.4 of the International Fire Code.
- 51. The addition of Section 905.2, entitled **Installation standards**, to read as follows:
 - **905.2 Installation standards.** 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.
- 52. The amendment of Section 905.3.2, entitled **Group A**, to delete Exceptions 1 and 2.
- 53. The amendment of Section 905.3, entitled **Required installations**, by adding Section 9.05.3.9 and related Exceptions to read as follows:
 - **905.3.9 Buildings exceeding 10,000 sq. ft.** In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200 feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

- 1. Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14.
- 2. R-2 occupancies of four stories or less in height having no interior corridors.
- 54. The amendment of Section 905.4, entitled **Location of Class I** standpipe hose connections, by amending Items 1, 3 and 5, and adding Item 7 to read as follows:
 - 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 an intermediate landing between stories, unless otherwise approved by the fire code official.
- 2. {No change}
- 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. {No change}
- 5. Where the roof has a slope of less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way a hose connection shall be 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. {No change}
- 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 thereafter, or as otherwise approved by the fire code official.
- 55. The amendment of Section 905.9, entitled **Valve supervision**, to add a second 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 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.
- 56. The amendment of Section 906.1, entitled **Where Required**, by the deletion of the Exception under Paragraph 1.
- 57. The amendment of Section 907.1.2, entitled **Fire alarm shop drawings**, by adding Sections 907.1.2.1, 907.1.2.2 and 907.1.2.3 to read as follows:
 - **907.1.2.1 Fire alarm control panel.** The fire alarm control panel shall be installed in an approved location adjacent to the main entrance to the building unless otherwise approved by the Fire Code Official.

907.1.2.2 Key/Codes. Fire alarm control panel functions such as silence and reset shall be operable without the use of a key or code. The panel cover may be locked, but the function keys cannot require a key or code.

907.1.2.3 Alarm verification. Alarm verification shall be provided for smoke detectors. Alarm verification shall be provided at the fire alarm control panel when more than thirty (30) detectors are installed.

Exception: Alarm verification is not required for single station type smoke detectors.

- 58. The amendment of Section 907.1, entitled **General**, by adding Section 907.1.4 to read as follows:
 - **907.1.4 Design Standards.** Fire alarm systems, automatic fire detectors, emergency voice alarm communication systems and notification devices shall be designed, installed and maintained in accordance with NFPA 72 and local amendments.

All alarm systems new or replacement serving 50 or more alarm initiating devices shall be addressable fire detection systems. Alarm systems serving more than 75 smoke detectors or more than 200 total fire alarm devices shall be analog intelligent addressable fire detection systems.

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

- 59. The amendment of Section 907.2.3, entitled **Group E**, to read as follows:
 - **907.2.3 Group E**. A manual fire alarm system shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

An approved smoke detection system shall be installed in Group E day care occupancies.

Unless separated by a minimum of 100' 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.

60. The amendment of Section 907.2.3, entitled **Group E**, by the amendment of Exception 1 and the addition of Exceptions 1.1 and 1.2, to read as follows:

Exceptions:

- Group E educational and day care occupancies with an occupant load of less than 50 when provided with an approved automatic sprinkler system.
- 1.1 Portable/Temporary buildings in Group E Educational occupancies with manual fire alarm systems are not required to be connected to the alarm system in the main building.
- 1.2 Residential in-home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2½ or less years of age, see Section 907.2.6.)
- 61. The amendment of Section 907.2.8, entitled **Group R-1**, by adding Section 907.2.8.4, entitled **Carbon Monoxide Detectors**, to read as follows:
 - **907.2.8.4 Carbon Monoxide Detectors**. In new and existing hotels and motels, carbon monoxide detectors shall be provided in all locations where there is gas-fired equipment, such as, but not limited to, dryers, HVAC, or hot water heaters. When the building is equipped with a fire alarm system, the carbon monoxide detectors shall be connected in such a manner as to cause the Fire Alarm system to sound an alarm when the carbon monoxide goes into alarm.
- 62. The amendment of Section 907.2.13, entitled **High-rise buildings**, to 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.

- 63. The amendment of Section 907.4.2, entitled **Manual fire alarm boxes**, by adding Section 907.4.2.7, entitled **Type**, to read as follows:
 - **907.4.2.7 Type.** Manual alarm initiating devices shall be an approved double action type.
- 64. The amendment of Section 907.6.1, entitled **Wiring**, by adding Section 907.6.1.1, entitled **Wiring Installation**, to read as follows:
 - **907.6.1.1 Wiring Installation.** All fire alarm systems shall be installed in such a manner that the failure of any single alarm-actuating or alarm-indicating device will not interfere with the normal operation of any other such devices. All systems shall be Class "A" wired with a minimum of six feet separation between supply and return loops. IDC Class "A" style D SLC Class "A" style 6 notification Class "B" Style Y.
- 65. The amendment of Section 907.6.3, entitled **Initiating device identification**, by deleting all four Exceptions.
- 66. The amendment of 907.6.4, entitled **Zones**, to read as follows:
 - **907.6.4 Zones.** Each floor shall be zoned separately and a zone shall not exceed 22,500 square feet (1860 m²). The length of any zone shall not exceed 300 feet (91 440 mm) in any direction. A maximum of one (1) water flow switch or three (3) tamper switches, five (5) pull stations or ten (10) smoke or heat detectors may be interconnected to be upon a single zone of a fire alarm control panel.

Exceptions:

- 1. Automatic sprinkler system zones shall not exceed the area permitted by NFPA 13
- Addressable systems.
- 67. The amendment of 907.6.4.2, entitled **High-rise buildings**, to read as follows:
 - **907.6.4.2 High-rise buildings.** In buildings that have floors located more than 75 feet (16 764 mm) above the lowest level of fire department vehicle access, a separate zone by floor shall be

provided for all of the following types of alarm-initiating devices where provided:

- 1. Smoke detectors.
- 2. Sprinkler water-flow.
- 3. Manual fire alarm boxes.
- 4. Other approved types of automatic fire detection devices or suppression systems.

Exception: Addressable systems.

68. The amendment of Section 907.6.6, entitled **Monitoring**, to read as follows:

907.6.6 Monitoring. Where required by this chapter, an approved UL listed central station, with a dual path communicator, in accordance with NFPA 72 shall monitor fire alarm systems.

Exception: Supervisory service is not required for automatic sprinkler systems in one- and two-family dwellings.

- 69. The amendment of Section 907.6.6, entitled **Monitoring**, by adding Section 907.6.6.3 to read as follows:
 - **907.6.6.3 Local alarm system.** When an automatic fire alarm system is not monitored by an approved central station alarm company, an external weatherproof, audible/visual alarm sounding device shall be provided in an approved location with an approved sign, with a minimum of four-inch (4") letters, reading "WHEN ALARM SOUNDS, CALL FIRE DEPARTMENT" adjacent to the alarm-sounding device.

An approved permanent sign reading "LOCAL ALARM ONLY – CALL FIRE DEPARTMENT" shall be provided on or adjacent to the fire alarm control panel and all manual fire alarm pull stations.

- 70. The amendment of Section 909, entitled **SMOKE CONTROL SYSTEMS**, by adding a new Section 909.22, entitled **Stairway or ramp pressurization alternative**, and subsections, to read as follows:
 - **909.22 Stairway or ramp pressurization alternative**. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smokeproof enclosure, interior exit stairways or

ramps shall be pressurized to a minimum of 0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the Fire Department as per Section 105.7.

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

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

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

Exceptions:

- 1. Control wiring and power wiring utilizing a 2-hour rated cable or cable system.
- 2. Where encased with not less than 2 inches (51 mm) of concrete.
- 3. Control wiring and power wiring protected by a listed electrical circuit protective system with a fire-resistance rating of not less than 2 hours.
- **909.22.1.2 Standby power.** Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.
- **909.22.1.3 Acceptance and testing.** Before the mechanical equipment is approved, the system shall be tested in the presence of the fire code official to confirm that the system is operating in compliance with these requirements.
- 71. The amendment of Section 910.2, entitled **Where required**, by changing Exceptions 2 and 3 to read as follows:
 - 2. Only manual smoke and heat removal shall be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.
 - 3. Only manual smoke and heat removal shall not be required in areas of buildings equipped with control mode special application sprinklers with a response time index of 50(m*S)^{1/2} or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.
- 72. The amendment of Section 910.2, entitled **Where required**, by adding Section 910.2.3, entitled **Group H**, with exceptions to read as follows:
 - **910.2.3 Group H.** Buildings and portions thereof used as a Group H occupancy as follows:
 - 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.

 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 waterreactive materials as required for a high-hazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

- 73. The amendment of Section 910.3, entitled **Smoke and heat vent locations**, by adding section 910.3.4, entitled **Vent operation**, to read as follows:
 - **910.3.4 Vent operation.** Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.
 - **910.3.4.1 Sprinklered buildings.** Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically.

The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only system per Section 910.2.

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

Exception: Listed gravity-operated drop out vents.

- 74. The amendment of Section 910.4.3.1, entitled **Makeup air**, to read as follows:
 - **910.4.3.1 Makeup air.** Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m2 per 0.4719 m3/s) of smoke exhaust.

- 75. The amendment of Section 910.4.4, entitled **Activation**, to read as follows:
 - **910.4.4 Activation.** The mechanical smoke removal system shall be activated automatically by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided.

Exception: Manual only systems per Section 910.2.

- 76. The amendment of Section 912.2, entitled **Location**, by adding Section 912.2.3, entitled **Hydrant distance**, 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.
- 77. The amendment of Section 913.2.1, **Protection of fire pump rooms**, by adding a second paragraph and exception to read as follows:

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 ft. in width and 6 ft. – 8 in. 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.

- 78. The amendment of Section 1006.2.2, entitled **Egress based on use**, by adding a new Section 1006.2.2.6, entitled **Electrical Rooms**, to read as follows:
 - **1006.2.2.6 Electrical Rooms.** For electrical rooms, special exiting requirements may apply. Reference the electrical code as adopted.
- 79. The amendment of Section 1009.1, entitled **Accessible means of egress required**, by adding Exception 4:

- 4. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009.
- 80. The amendment of Section 1010.1.9.4, entitled **Bolt Locks**, by changing Exceptions 3 and 4 to read as follows:
 - Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, M or S occupancy, manually operated edge- or surface- mounted bolts are permitted on the inactive leaf. The inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.
 - 4. Where a pair of doors serves a Group A, B, F, M or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf provided such inactive leaf is not needed to meet egress capacity requirements and the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. The inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.
- 81. The amendment of Section 1010.1.9.7, entitled **Delayed egress locks**, by amending the first paragraph to read as follows:
 - **1010.1.9.7 Delayed egress locks**. A permit from the Fire Department is required prior to the installation of any delayed egress locks or other special locking systems. Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A, E and H occupancies in buildings which are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 8 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit.

{Items 1-8 remain unchanged}

82. The amendment of Section 1010.1.9.9., entitled **Electromagnetically locked egress doors**, by amending the first paragraph to read as follows:

1010.1.9.9 Electromagnetically locked egress doors. Doors in the *means of egress* that are not otherwise required to have panic hardware in buildings with an occupancy in Group A, B, E, I-1, I-2, M, R-1 or R-2 and doors to tenant spaces in Group A, B, E, I-1, I-2, M, R-1 or R-2 shall be permitted to be electromagnetically locked if equipped with *listed* hardware that incorporates a built-in switch and meet the requirements below:

{Items 1-6 remain unchanged}

- 83. The amendment of Section 1010.1.9.11, entitled **Stairway Doors**, by adding Exception 6 to read as follows:
 - In stairways serving more than four stories, doors can be locked from stairway side, if lock is connected to fire alarm system and key to the door is provided in a Knox Box. Activation of fire alarm system must release locks on all stairway doors.
- 84. The amendment of Section 1013.5, entitled **Internally illuminated** exit signs, to read as follows:
 - **1013.5 Internally illuminated exit signs.** Electrically powered and self-luminous exit signs shall be listed and labeled in accordance with UL 294 and shall be installed in accordance with the manufacturer's instructions and Chapter 27. Exit signs shall be illuminated at all times. Photoluminescent exit signs are prohibited.
- 85. The addition of Section 1016.3, entitled **Electrical room means of egress**, to read as follows:
 - **1016.3 Electrical room means of egress.** For electrical rooms containing equipment over 600 volts, see electrical code, NFPA 70, Article 110, generally.
- 86. The addition of Section 1017.4, entitled **Roof vent increase**, to read as follows:
 - **1017.4. Roof vent increase.** In buildings that are one story in height, equipped with automatic heat and smoke roof vents complying with Section 910 and equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the maximum exit access travel distance shall be 400 feet for occupancies in Group F-1 or S-1.

- 87. The amendment of Section 1020.1, entitled **Construction**, to add an 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 shall activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.
- 88. The amendment of Section 1029.1.1.1, entitled **Spaces under grandstands and bleachers**, by deleting it in its entirety.
- 89. The amendment of Section 1101.1, entitled **Scope**, by adding an Exception to read as follows:

Exception: Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation shall be deemed to be incompliance with the requirements of this chapter.

90. The amendment of Section 1203.1, entitled **General**, to read as follows:

1203.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the *International Mechanical Code*.

Where 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*.

- 91. The amendment of Table 1505.1, entitled **MINIMUM ROOF COVERING CLASSIFICATION FOR TYPES OF CONSTRUCTION**, by deleting footnote c and replacing footnote b with the following:
 - 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.

- 92. The amendment of Section 1505.7, entitled **Special purpose roofs**, by deleting it in its entirety.
- 93. The amendment of Section 1511.1, entitled **General**, by amending the first paragraph to read as follows:
 - **1511.1 General.** Materials and methods of applications used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15. All individual replacement shingles or shakes shall be in compliance with the rating required by Table 1505.1.
- 94. The amendment of Section 1612.3, entitled **Establishment of flood** hazard areas, to read as follows:
 - 1612.3 Establishment of flood hazard areas. To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study for Tarrant County, Texas, dated September 25, 2009, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.
- 95. The amendment of Section 1612.3.2, entitled **Determination of impacts**, to read as follows:
 - **1612.3.2 Determination of impacts**. In flood hazard areas where design flood elevations are specified, the applicant shall provide an engineering analysis developed by a licensed professional engineer that demonstrates that the proposed work will not increase the design flood elevation or reduce conveyance at any point within the jurisdiction in accordance with the provisions of the Design Criteria Manual and the Flood Damage Prevention Chapter of the Arlington City Code.
- 96. The amendment of Section 1612.4, entitled **Design and construction**, to read as follows:

- **1612.4 Design and construction.** The design and construction of buildings and structures located in flood hazard areas, including flood hazard areas subject to high-velocity wave action, shall be in accordance with Chapter 5 of ASCE 7 and with ASCE 24 and provisions of the City of Arlington's Flood Damage Chapter.
- 97. The amendment of Section 1612.5, entitled **Flood hazard** documentation, to read as follows:
 - **1612.5 Flood hazard documentation.** The flood hazard documentation as identified in the City of Arlington's Flood Damage Chapter shall be prepared and sealed by a professional engineer and submitted to the building official.
- 98. The amendment of Section 1704.2, entitled **Special inspections** and tests, is amended to read as follows:
 - 1704.2 Special inspections and tests. Where application is made to the Building Official for construction as specified in Section 105, the owner or the owner's authorized agent, or the registered design professional in responsible charge, other than the contractor, shall employ one or more approved agencies to provide special inspections and tests during construction on the types of work listed under Section 1705 and identify the approved agencies to the Building Official. The special inspector shall not be employed by the contractor. These special inspections and tests are in addition to the inspections identified by the Building Official that are identified in Section 110.
- 99. The amendment of Section 1704.2.1, entitled **Special inspector qualifications**, is amended to read as follows:
 - 1704.2.1 Special inspector qualifications. Prior to the start of construction and or upon request, the approved agencies shall provide written documentation to the registered design professional in responsible charge and the building official demonstrating the competence and relevant experience or training of the special inspectors who will perform the special inspections and tests during construction. Experience or training shall be considered relevant where the documented experience or training is related to the same type of special inspection or testing activities for projects of similar complexity and material qualities. These qualifications are in addition to qualifications specified in other sections of this code.

The registered design professional in responsible charge and engineers of record involved in the design of the project are permitted

to act as the approved agency and their personnel are permitted to act as special inspectors for the work designed by them, provided they qualify as special inspectors.

- 100. The amendment of Section 1704.2.4, entitled **Report requirement**, is amended to read as follows:
 - 1704.2.4 Report requirement. Approved agencies shall keep records of special inspections and tests. The approved agency shall submit reports of special inspections and tests to the Building Official upon request, and to the registered design professional in responsible charge. Individual inspection reports [Reports] shall indicate that work inspected or tested was or was not completed in conformance to approved construction documents. Discrepancies shall be brought to the immediate attention of the contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the building official and the registered design professional in responsible charge prior to the completion of that phase of the work. A final report documenting required special inspections and tests, and the correction of any discrepancies noted in the inspections or tests, shall be submitted at a point in time agreed upon prior to the start of work by the owner or the owner's authorized agent to the building official.
- 101. The amendment of Section 1704.2.5.2, entitled **Fabricator** approval, to read as follows:
 - 1704.2.5.1 Fabricator approval. Special inspections during fabrications required by Section 1704 are not required where the work is done on the premises of a fabricator registered and approved to perform such work without special inspection. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved agency, or a fabricator that is enrolled in a nationally accepted inspections program. At completion of fabrication, the acceptable or approved fabricator shall submit a certificate of compliance to the owner or the owner's authorized agent or the registered design professional in responsible charge, stating that the work was performed in accordance with the approved construction documents. The certificate of compliance shall also be made available to the Building Official upon request.
- 102. The amendment of Section 1807.2, entitled **Retaining walls**, to read as follows:

1807.2 Retaining walls. Retaining walls exceeding four feet (4') in developed height (the height from the base of the foundation to the top of the wall) at any point shall be designed by a professional engineer. A wall built in tiers shall be considered a single wall in developed height when the base of the upper tier is set back from the base of the lower tier less than one and one-half (1½) times the developed height of the wall section below. Walls supporting an imposed load such as a building, driveway or other permanent construction closer to the wall than one and one-half (1½) times the developed height of the wall shall be designed by a professional engineer.

When required to be designed by an engineer the design shall be in accordance with Sections 1807.2.1 through 1807.2.3.

- 103. The amendment of Section 2503.1, entitled **Inspection**, to read as follows:
 - **2503.1 Inspection.** Gypsum in fire-resistive construction and lath shall be inspected.
- 104. The amendment of Section 2901.1, entitled **Scope**, to add a paragraph to read as follows:

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.

- 105. The amendment of Section 2902.1, entitled **Minimum number of fixtures**, to read as follows:
 - **2902.1 Minimum number of fixtures.** Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 2902.1. Types of occupancies not shown in Table 2902.1 shall be considered individually by the building official. The number of occupants shall be determined by this code unless sufficient data is approved by the building official for a different number of occupants. Occupancy classification shall be determined in accordance with Chapter 3.
- 106. The addition of Section 2902.1.3, entitled **Additional fixtures for food preparation facilities**, to read as follows:
 - **2902.1.3 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.

- **2902.1.3.1 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.
- **2902.1.3.2 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 tools 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 Arlington health department.
- 107. The amendment of Table 2902.1, entitled **MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES**, to add footnote "f", "g", and "h" to read as follows:
 - f. The minimum number of drinking fountains shall comply with Table 2902.1 and Chapter 11. Drinking fountains shall not be installed in toilet rooms.
 - g. Drinking fountains are not required for an occupant load 30 or less and for dining and/or drinking establishments.
 - h. Where urinals are provided, urinals shall not be substituted for more than 67% of the required water closets in assembly and educational *occupancies*. Urinals shall not be substituted for more than 50% of the required water closets in all other *occupancies*.
- 108. The amendment of Section 2902.2, entitled **Separate facilities**, to add Exceptions 4 and 5 to read as follows:
 - 4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 50 or less.
 - 5. Separate facilities shall not be required in medical offices classified as business occupancies.
- 109. The amendment of Section 3002.1, entitled **Hoistway enclosure protection**, to add Exceptions to read as follows:

Exceptions:

- 1. Elevators wholly located within atriums complying with Section 404 shall not require hoistway enclosure protection.
- 2. Elevators in open or enclosed parking garages that serve only the parking garage, and complying with Sections 406.5 and 406.6, respectively, shall not require hoistway enclosure protection.
- 110. The amendment of Section 3005.4, entitled **Machine rooms,** control rooms, machinery spaces and control spaces, to read as follows:
 - Section 3005.4 Machine rooms, control rooms, machinery spaces and control spaces. Elevator machine rooms, control rooms, control spaces and machinery spaces shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.
- 111. The amendment of Section 3005, entitled **MACHINE ROOMS**, to add Section 3005.7, et seq., to read as follows:
 - 3005.7 Fire Protection in Machine rooms, control rooms, machinery spaces and control spaces.
 - **3005.7.1 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 3005.7.2.1.
 - **3005.7.2.1 Prohibited locations.** Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces and elevator hoist-ways.
 - **3005.7.2.2 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.
 - **3005.7.3 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.
 - **3005.7.4 Shunt trip.** Means for elevator shutdown in accordance with Section 3005.5 shall not be installed.

- 112. The amendment of Section 3005, entitled **MACHINE ROOMS**, to add Section 3005.8 to read as follows:
 - **3005.8 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."
- 113. The amendment of Section 3006.2, entitled **Hoistway opening** protection required, to add Item 5 to read as follows:
 - 5. The building is a high rise and the elevator hoistway is more than 75 feet (22 860 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.
- 114. The amendment of Section 3109, entitled **SWIMMING POOLS**, **SPAS AND HOT TUBS**, by replacing said section to read as follows:

SECTION 3109 SWIMMING POOL ENCLOSURES AND SAFETY DEVICES

- **3109.1 General.** Swimming pools shall comply with the requirements of this section and other applicable sections of this code.
- **3109.2 Definition.** The following word and term shall, for the purposes of this section and as used elsewhere in this code, have the meaning shown herein.
- **SWIMMING POOLS.** Any structure intended for swimming, recreational bathing or wading that contains water over 24 inches (610 mm) deep. This includes in-ground, above-ground and onground pools; hot tubs; spas and fixed-in-place wading pools.
- **3109.3 Public Swimming Pools.** Public swimming pools (pools not accessory to a 1- or 2-family dwelling) shall be completely enclosed by a fence that complies with the Health and Sanitation Chapter, Article VII, Public Swimming Pool, Section 7.01. Driveway access gates across a paved or improved surface intended for regular vehicle access shall not be located in a swimming pool barrier.
- **3109.4 Residential Swimming Pools.** See Section 1.04(D) of the "Construction" Chapter of the Arlington City Code.

3109.5 Entrapment Avoidance. Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.