

Wellington Fire Protection District

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WELLINGTON FIRE PROTECTION DISTRICT RESOLUTION #2019-02

A RESOLUTION ADOPTING THE 2018 EDITION OF THE INTERNATIONAL FIRE CODE, AS AMENDED, REGULATING AND GOVERNING CONDITIONS HAZARDOUS TO LIFE AND PROPERTY FROM FIRE AND EXPLOSION, AND PROVIDING FOR THE ISSUANCE OF PERMITS FOR HAZARDOUS USES OR OPERATIONS.

WHEREAS, the Board of Directors of the Wellington Fire Protection District (District) has previously adopted the 2012 International Fire Code and relative Appendices, as amended.

WHEREAS, the Board of Directors deems it necessary to adopt the following code for the purpose of establishing rules of conduct and standards for the protection of life, health, property, security and welfare of the inhabitants of the District; and

WHEREAS, the Board of Directors has considered the effect of fire code enforcement within the boundaries of the District and has determined that enforcement of the proposed code would not cause undue hardship or suppression of economic growth within the District; and

WHEREAS, the Board of Directors has studied the necessity for a realistic and reasonable level of fire protection to be provided by the District.

NOW, THEREFORE, be it resolved by the Board of Directors of the District in the County of Larimer, State of Colorado, that:

 The District Board of Directors adopts the 2018 International Fire Code and relative Appendices, as amended, (EXHIBIT A).

ADOPTED AND APPROVED this 15th day of May 2019.

WELLINGTON FIRE PROTECTION DISTRICT

President/Chair

ATTEST:

By

EXHIBIT "A"

2018 International Fire Code, as amended

Section 1, Adoption of the International Fire Code, 2018 Edition, as amended

Pursuant to the Authority conferred by the District and the laws of the State of Colorado, there is hereby adopted by the District, for the purposes of safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises and conditions affecting the safety of fire fighters and emergency responders during emergency operations, International Fire Code, 2018 Edition, as promulgated by the International Code Council, being particularly the 2018 Edition thereof, and the whole thereof, including Chapters 1 through 68 in the 2018 International Fire Code, inclusive, and appendices, save except as any portion of the code or appendices is hereinafter deleted, modified or amended. Not less than two (2) copies of this fire code shall be on file in the office of the Fire Marshal and may be inspected at regular business hours and purchased from the District at a price not to exceed ninety-seven dollars (\$97.00) per copy. The provisions of this fire code shall be controlling within the boundaries of the District.

- 101.1 Amend this section to read **Title.** These regulations shall be known as the Fire Code of the Wellington Fire Protection District, hereinafter referred to as "this code".
- 102.4 <u>Amend this section to read</u> **Application of Building Code.** The design and construction of new structures shall comply with the *International Building Code or International Residential Code* and the *International Fire Code*, and any alterations, additions, changes in use or changes in structures required by this code, which are within the scope of the *International Building Code or International Residential Code*, shall be made in accordance therewith.
- 102.7 <u>Amend this section to read</u> **Referenced codes and standards**. The codes and standards referenced in this code shall be the most currently published edition of those that are listed in Chapter 80, and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2.
- 103.4 Amend this section to read **Liability**. The fire code official, member of the board of appeals, officer or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or a mission or by reason of an act or mission in the discharge of official duties, unless such act or a mission is willful and wanton, as provided in the Colorado Governmental Immunity Act, Section 24-10-101, *et seq.*, C.R.S.
- 103.4.1 <u>Amend this section to read</u> **Legal defense.** Any suit or criminal complaint instituted against any officer or employee because of an actor mission performed by the officer employee in the lawful discharge of duties an under the provisions of this code, unless such act or a mission is willful and wanton, as provided in the Colorado Governmental Immunity Act, Section 24-10-101, *et seq.*, C.R.S. Shall be defended by a legal representative of the jurisdiction until the final termination of the proceedings. The fire code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code: and any officer of the department of fire prevention, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of act or omission in the performance of official duties in connection therewith.
- 105.1.2 <u>Amend this section to read</u> **Types of permits.** There shall be two types of 105 as follows:

- 1. Operational permit. An operational permit allows the applicant to conduct an operation or a business for which a permit is required by Section 105.6 for either:
 - 1.1.1. A prescribed period
 - 1.1.2. Until renewed or revoked
- Construction permits. A construction permit allows the applicant to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, the likes of which are regulated by this code. A construction permit also allows the applicant to install or modify systems and equipment for which a permit is required by Section 105.7.
- 105.4.1 <u>Amend this section to read</u> **Submittals.** *Construction documents* and supporting data shall be submitted with each application for a permit and in such form and detail as required by the *fire code official*. The *construction documents* shall be prepared by a registered design professional where required by the jurisdiction in which the project is to be constructed.
- 105.6.30 Amend this section to read Mobile food preparation vehicles. A permit is required for mobile food preparation vehicles equipped with cooking appliances.
- 105.6.36 Amend this section to read **Outdoor assembly event**. An operational permit is required to conduct an outdoor assembly event where planned attendance exceeds 50 persons.
- 105.6.51 Amend this section to read Care Facilities within a Dwelling. An operational permit is required to conduct a care facility within a dwelling.
- 105.7.25 <u>Amend this section to read</u> **Temporary membrane structures and tents.** A construction permit is required to erect an air-supported temporary membrane structure, a temporary stage canopy or a tent having an area in excess of 200 square feet (18.58 m²).
- 109.1 Amend this section to read Board of Appeals. In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application an interpretation of this code, there shall be and is hereby created a board of appeals to be known as the fire board of appeals. The members of the Wellington Fire Protection District Board of Directors shall appoint and constitute the fire board of appeals as necessary. The fire code official shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board shall adopt rules of procedure for conducting its business in shall render all decisions and findings in writing to the appeal went with a duplicate copy to the fire code official. Application for an appeal and all process and procedures for an appeal shall be as stipulated in 109.1.1.
- 109.1.1 <u>Add the following section</u> **Procedures.** To request a hearing before the board of appeals, the applicant shall file a request in writing to the fire chief. The fire chief shall arrange for the board of appeals to meet within 10 working days from the receipt of the request. All applicable fees as stated in the fire district fee schedule shall be paid at the time the written request is made.
- 109.3 Amend this section to read **Qualifications**. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to hazards of fire, explosions, hazardous conditions, or fire protection systems.
- 110.4 Amend this section to read Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under the provisions of this code, shall be guilty of a misdemeanor, and upon conviction shall be subject to the penalties, costs and orders provided by local enforcement agency and as determined-by the District. Each day that a violation continues after due notice has been served shall be deemed a separate offense.
- 110.5 <u>Add this section in its entirety</u> **Work commencing before permit issuance.** In addition to penalty you set forth in section 110.4, any person or firm who, before obtaining the necessary permit(s), commences any construction of, or work on, a building, structure, fire protection system, fire alarm system, or fire extinguishing system that is not

otherwise exempted from obtaining a permit, shall be subject to a processing and penalty fee in addition to the standard prescribed permit fee. Such additional fine shall be equal to the permit fee, except that such fine shall not be less than \$50 or more than \$1000 for the first such violation. A person or firm committing the same violation repeatedly is subject to processing and penalty fees equal to double the amount of the permit be or double the amount of the preceding violation, whichever is greater, for every same such subsequent violation committed thereafter within 180-day period.

112.4 <u>Amend this section to read</u> **Failure to comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine as determined by the court and shall be subject to a fee as adopted by the fire district.

GENERAL DEFNITIONS Amend or added on alphabetic sequence in the following respects:

BED & BREAKFAST FACILITIES. A facility providing accommodations for 6 (six) guests or less that is also occupied as the single-family residence of the proprietor.

COOKING APPLIANCES. Appliances used in a food service establishment for heating or cooking food and which produce grease, grease vapors, steam, fumes, smoke or odors. For the purpose of this definition, a food service establishment shall include any building, or a portion thereof used for preparation and food service.

CONTROLLED BURNING. Any fire intentionally ignited to meet specific land management objectives, such as to reduce flammable fuels, restore ecosystem health, recycle nutrients, or prepare an area for new trees or vegetation. Controlled burning may also be known by the term "Pile Burning."

DWELLING. A building used exclusively for residential occupancy and for permitted accessory, including single family dwellings, two- family dwellings and multifamily dwellings. The term dwellings shall not include hotels, motels, homeless shelters, seasonal overflow shelters, tents, or other structures designed for use primarily for temporary occupancy. Any dwelling shall be deemed to be a principle building.

FIRE AREA. The aggregate floor area enclosed and bounded by fire walls meeting the requirements of Section 706 of the International Building Code and, exterior walls or horizontal assemblies of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above. For buildings constructed under the *International Residential Code*, the fire area is the aggregate floor area enclosed and bounded by exterior walls of a building.

FAMILY. Any number of persons who are all related by blood, marriage, adoption, guardianship, or other duly authorized custodial relationship, and who live together as a single housekeeping unit and share common living, sleeping, cooking and eating facilities.

LIVING UNIT. One family, plus up to two additional individuals whose place of residence is with the family in the dwelling.

MOBILE FOOD PREPARATION VEHICLES. Vehicles that contain cooking appliances for the purpose of preparing and/or serving food to the public. Vehicles intended for private recreation shall not be considered mobile food preparation vehicles.

MOBILE FUELING. The operation of dispensing liquid fuels from tank vehicles into the fuel tanks of vehicles. Mobile fueling may also be known by the terms "Mobile fleet fueling," "Wet fueling", "Wet hosing", or "Hot fueling".

SLEEPING UNIT (BEDROOM). A habitable room within a dwelling or other housing unit designed primarily for the purpose of sleeping. The presence of a bed, cot, mattress, convertible sofa or other similar furnishing used for sleeping

purposes shall be a prima facie evidence that such space or room is a sleeping room. The presence of closets or similar storage facilities shall not be considered relevant factors in determining whether or not is sleeping room.

RESORT LODGE CABIN. Cabin that is a building or group of building, under single management and ownership, containing rooms and/or dwelling units available for temporary rental to guests where the primary attraction is generally recreational features or activities.

ROOM, SLEEPING (BEDROOM). A habitable room within a dwelling or other housing unit designed primarily for the purpose of sleeping. The presence of a bed, cot, mattress, convertible sofa or other similar furnishing used for sleeping purposes shall be a prima facie evidence that such space or room is a sleeping room. The presence of closets or similar storage facilities shall not be considered relevant factors in determining whether or not is sleeping room.

TOWNHOUSE. A single-family dwelling unit constructed as part of a group of two of more attached individual dwelling units.

OCCUPANCY CLASSIFICATIONS

Institutional Group I-1 – Five or fewer persons receiving care. A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3.

Institutional Group I-2 - Five or fewer persons receiving care. A facility such as the above with five or fewer persons receiving such care shall be classified as Group R-3 or shall comply with the International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3.

Residential Group R-3 – Care facilities within a dwelling. Care facilities for eight in care or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the International Residential Code.

- 307.2.2 Add to this section Time and Atmospheric Restrictions. Open burning shall only be performed when time and atmospheric conditions comply with the limits set forth in the Open Burning Permit.
- 307.4.1 <u>Amend this section in its entirety</u> **Bonfires.** A bonfire shall not be conducted within 100 (30m) of a structure or combustible material unless the fires is contained in a barbecue pit. Conditions that could cause a fire to spread within 100 ft (30m) of a structure shall be eliminated prior to ignition.
- 307.4.1.1 <u>Amend this section in its entirety</u> **Bonfire Size.** The fuel package pile for a bonfire it must be approved prior to ignition an shall not exceed 10 feet in diameter in 8 feet in height and less approved by the fire code official. Based on atmospheric conditions, location, adjacent structures, combustible materials or wildland fire danger rating's, smaller fuel package piles may be required period fuels for a bonfire shall be clean, dry, untreated wood products only. Fuel shall not be added to the bonfire once it is ignited without prior approval of the fire code official. The use of Class I flammable liquids is prohibited. Class II combustible liquids may only be used prior to ignition and only in accordance with an approved ignition plan.
- 307.4.2 <u>Amend this section in its entirety</u>, <u>Outdoor Fireplaces</u>. Outdoor fireplaces shall be used in accordance with the manufacturer's instructions. Outdoor fireplaces shall not be placed closer to combustibles than stated in the manufacturer's instructions and if the manufacturer's instructions are not available, or do not establish a distance, they shall not be operated within 15 feet of a structure or combustible material. Outdoor fireplaces shall not be operated underneath the structure of any type.
- 308.1.4 <u>Amend this section to read</u> **Outdoor Cooking Devices**. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 15 feet (4572 mm) of combustible construction.

Exceptions:

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

- 3. LP-gas cooking devices having LP-gas container with a water capacity not greater than 48 pounds [nominal 20 pounds (9.1 kg) LP-gas capacity].
- 4. Where a more restrictive code, policy, ordinance, or covenant exists.
- 308.1.6.3 Amend this section to read Sky lanterns. The use of sky lanterns, tethered or untethered, is prohibited.
- 311.2.2 Amend this section to read **Fire protection**. Fire alarm, sprinkler and stand-pipe systems shall be maintained in an operable condition at all times.

Exceptions:

- Where the premises have been cleared of all combustible materials and debris and, in the opinion of the fire code official, the type of construction, fire separation distance and security of the premises do not create a fire hazard.
- 2. Where approved by the fire code official, buildings that will not be heated and where fire protection systems will be exposed to freezing temperatures, fire alarm and sprinkler systems are permitted to be placed out of service and standpipes are permitted to be maintained as dry systems (without an automatic water supply), provided that the building does not have contents or storage, and windows, doors and other openings are secured to prohibit entry by unauthorized persons.
- 3. LP-gas cooking devices having LP-gas container with a water capacity not greater than 48 pounds [nominal 20 pounds (9.1 kg) LP-gas capacity].
- 4. Where approved by the fire code official, fire alarm and sprinkler systems are permitted to be placed out of service in seasonally occupied buildings: that will not be heated; where fire protection systems will be exposed to freezing temperatures; where fire areas do not exceed 6,000 square feet (557.42 m²); and/or that do not store motor vehicles or hazardous materials.
- 315.3.3 <u>Amend this section to read</u> **Equipment rooms.** Combustible material shall not be stored in boiler rooms, mechanical rooms, or electrical equipment rooms, and other rooms where a potential ignition source exists, as determined by the fire code official.
- 319.1 Amend this section to read **General**. Mobile food preparation vehicles that are equipped with cooking appliances shall comply with this section.
- 319.4.1 Amend this section to read Fire protection for cooking appliances. Cooking appliances that produce smoke or grease-laden vapors shall be protected by automatic fire extinguishing systems in accordance with Section 904.12.
- 319.8 Amend this section to read LP-gas systems. Where LP-gas systems provide fuel for such systems shall comply with Chapter 61 and Sections 319.8.1 through 319.8.5.
- 505.1 <u>Amend this section to read</u> **Address identification.** New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 6 inches (127 mm) high, unless otherwise approved, with a minimum stroke width of 1 inch (12.7 mm). Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or sign or means shall be used to identify the structure. Address numbers shall be maintained.
- 503.1 <u>Amend this section in its entirety</u> **Where required.** Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1 through 503.1.3 and Appendix D "Fire Apparatus Access Roads.
- 503.2 Amend this section in its entirety **Specifications.** Fire apparatus access roads shall be installed an arranged in accordance with Sections 503,2.1 through 503.2.8 and Appendix D "Fire Apparatus Access Roads.
- 503.2.1 Amend this section in its entirety **Dimensions.** Fire apparatus access roads shall have an unobstructed width of not less than 20 feet, exclusive of shoulders, except for proved security gates in accordance with section 503.6, and in unobstructed vertical clearance of not less than 14 feet.

- 505.1 <u>Amend this section in its entirety</u> **Address Identification.** New and existing buildings or facilities shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be in Arabic numbers or alphabetic letters. Numbers shall not be spelled out. Address identification shall be maintained.
- 501.1.1 Addresses shall be assigned by the governmental entity having jurisdiction, (Town of Wellington), and shall comply with Larimer County Street Naming an Addressing Standards as contained in the Larimer County Urban Area Street standards.
- 505.1.4 Amend this section in its entirety. The address numerals for one- and two- family dwellings shall be a minimum of 6 inches posted on a contrast it background. If bronze or brass numerals are used, they shall only be posted on a black background for visibility.
- 505.15 Amend this section in its entirety Monument signs may be used in lieu of address numerals on the building as approved by the fire code official.
- 505.16 Amend this section in its entirety. Buildings with multiple suites, apartments or unit shall have the individual suites, apartments or units provided with individual identification numbers in sequential order. Suits, apartments or units located on the first floor shall be identified by numbers within the 100 or 1000 range series; suites, apartments or units located on the 2nd floor shall be identified by numbers within the 200 or 2000 range series; suites, apartment or units located on the 3rd floor unit shall be identified by numbers within the 300 or 3000 range or series. Higher floors shall follow the same numbering sequence.
- 505.17 Amend this section in its entirety Buildings, either individually or part of a multi building complex, that have emergency access lanes on sides other than on the address street side, shall have the address numbers in street name on each side that fronts the fire line.
- 505.1.8 Amend this section in its entirety. Buildings that are add rest on one street, but are accessible from an adjoining street, shall have the address numbers in street name on each side that is adjacent to that other street.
- 505.1.9 Amend this section in its entirety. Approved signage shall be provided inconspicuous locations within buildings to provide clear direction to locate any sweet, apartment or unit within the building.
- 505.1.10 Amend this section in its entirety. Multiple building complexes shall be provided with approved signage as needed to direct first responders to individual buildings.
- 507.2 Amend this section in its entirety Types of water supply. A water supply shall consist of pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required sustainable flow.
- 507.5 Amend this section in its entirety **Fire hydrant systems.** Fire hydrant system shall comply with sections 507.5.1 through 507.5.6 and Appendix C
- 607.5 Amend this section in its entirety. **Solid-Fuel Fired Appliances.** Solid fuel commercial cooking appliances shall comply with applicable provisions of the National Fire Protection Association (NFPA).
- 701.2.2 Add section to read **Fire-resistance-rated labeling**. The fire-resistance rating shall be marked in an approved manner on the following fire resistance rated construction features:
 - Structural members
 - 2. Exterior walls
 - 3. Fire walls, fire barriers, fire partitions
 - 4. Horizontal assemblies
 - 5. Shaft enclosures

- 701.3.1 Add section to read **Smoke barriers labeling**. The fire-resistance rating and smoke-resistant characteristics of smoke barriers shall be marked in an approved manner on the rated construction feature.
- 901.4.2 <u>Amend this section to read</u> **Nonrequired fire protection systems.** A fire protection system or portion thereof not required by this code, or the International Building Code, or the International Residential Code shall be the applicable requirements of this code, the International Building Code, and the International Residential Code.
- 901.4.3 <u>Amend this section to read</u> **Fire areas**. Where buildings, or portions thereof, are divided into fire areas so as not to exceed the limits established for requiring a fire protection system in accordance with this chapter, such fire areas shall be separated by fire walls constructed in accordance with the International Building Code or horizontal assemblies constructed in accordance with the International Building Code, or both, having a fire-resistance rating of not less than that determined in accordance with the International Building Code.
- 901.7 <u>Amend this section to read</u> **Systems out of service.** Where a required fire protection system is out of service, the fire department shall be notified immediately and where required by the fire department, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shutdown until the fire protection system has been returned to service.
- 901.9 <u>Amend this section to read</u> **Termination of monitoring services.** For fire protection systems required to be monitored by the authority having jurisdiction, notice shall be made to the fire code official whenever system monitoring services are terminated. Notice shall be made in writing, to the fire code official by the provider of the monitoring service being terminated.
- 903.2.1 Amend this section to read an automatic sprinkler system shall be provided throughout buildings as Group A occupancies as provided in this section.
- 903.2.1.1 Amend this section to read **Group A-1. 903.2.1.1 Group A-1.** An automatic sprinkler system shall be provided throughout buildings containing Group A-1 occupancies where one of the following conditions exists:
 - 1. The fire area exceeds 6,000 square feet (1115 557 m2).
 - 2. The fire area has an occupant load of 50 or more.
- 903.2.1.2 Amend this section to read **Group A-2.** An automatic sprinkler system shall be provided throughout buildings containing Group A-2 occupancies
 - 1. The fire area exceeds 5,000 square feet (464 m2).
 - 2. The fire area has an occupant load of 50 or more.
- 903.2.1.3 <u>Amend this section to read</u> **Group A-3.** An automatic sprinkler system shall be provided throughout buildings containing Group A-3 occupancies where one of the following conditions exists:
 - 1. The fire area exceeds 6,000 square feet (557 m2).
 - 2. The fire area has an occupant load of 50 or more.
- 903.2.1.4 Amend this section to read **Group A-4.** An automatic sprinkler system shall be provided throughout buildings containing Group A-4 occupancies where one of the following conditions exists:
 - 1. The fire area exceeds 6,000 square feet (557 m²).
 - 2. The fire area has an occupant load of 50 or more.
- 903.2.1.6 <u>Amend this section to read</u> **Assembly occupancies on roofs.** Where an occupied roof has an assembly occupancy with an occupant load exceeding 50 for Group A occupancies, an automatic sprinkler system shall be provided throughout buildings in accordance with Section 903.3.1.1 or 903.3.1.2.
- 903.2.1.7 <u>Amend this section to read</u> **Multiple fire areas.** An automatic sprinkler system shall be provided where multiple fire areas of Group A-1, A-2, A-3 or A-4 occupancies share exit or exit access components and the combined occupant load of these fire areas is 50 or more.

- 903.2.2 <u>Amend this section to read</u> **Ambulatory care facilities.** An automatic sprinkler system shall be installed throughout the entire building containing an ambulatory care facility where either of the following conditions exist at any time:
 - 1. Four or more care recipients are incapable of self-preservation.
 - 2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.
- 903.2.3 Amend this section to read **Group E.** An automatic sprinkler system shall be provided for Group E occupancies as follows:
 - 1. Throughout all Group E fire areas greater than 6,000 square feet (557 m²) in area.
 - 2. The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies.
 - 3. The Group E fire area has an occupant load of 50 or more.
- 903.2.4 Amend this section to read All 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. A Group fire area exceeds 6,000 square feet (557 m²).
 - 2. A Group fire area is located more than two stories above grade plane.
 - 3. The combined area of all Group fire areas on all floors, including any mezzanines, exceed 6,000 square feet (557 m²).
 - 4. A Group occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).
- 903.2.6 Amend this section to read **Group I.** An automatic sprinkler system shall be provided throughout buildings with a Group I fire area

Exceptions:

- 1. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1, Condition 1 facilities.
- 2. An automatic sprinkler system is not required where Group I-4 daycare facilities are at the level of exit discharge and where every room where care is provided has not fewer than one exterior exit door.
- 3. In buildings where Group I-4 daycare is provided on levels other than the level of exit discharge, an automatic sprinkler system in accordance with Section 903.3.1.1 shall be installed.
- 903.2.7 Amend this section to read **Group M.** An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:
 - 1. A Group M fire area exceeds 6,000 square feet (557 m²).
 - 2. A Group M fire area is located more than two stories above grade plane.
 - 3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 6,000 square feet (557 m²).
 - 4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m²).
- 903.2.9 Amend this section to read **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 m²).
 - 2. A Group S-1 fire area is located more than two stories above grade plane.
 - 3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 6,000 square feet (557 m²).
 - 4. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 m²).
 - 5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).
- 903.2.9.1 Amend this section to read **Repair garages.** An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406.8 of the International Building Code, as shown:
 - 1. Buildings having two or more stories above grade plane, including basements, with a fire area containing a

- repair garage exceeding 6,000 square feet (557 m²).
- 2. Buildings not more than one story above grade plane, with a fire area containing a repair garage exceeding 6,000 square feet (557 m²).
- 3. Buildings with repair garages servicing vehicles parked in basements.
- 4. A Group S-1 fire area used for the repair of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 m²).
- 4 903.2.9.2 Amend this section to read Bulk storage of tires. Buildings and structures where the area for the storage of tires exceeds 10,000 cubic feet (566 283 m3) shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
 - 1. Where the fire area of the enclosed parking garage exceeds 6,000 square feet (557 m²).
 - 2. Where the enclosed parking garage is located beneath other groups.

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

- 903.2.10 <u>Amend this section to read</u> **Group S-2 enclosed parking garages.** An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.6 of the International Building Code where either of the following conditions exists:
 - 1. Where the fire area of the enclosed parking garage exceeds 6,000 square feet (557 m²).
 - 2. Where the enclosed parking garage is located beneath other groups.

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

- 903.2.11.1 <u>Amend this section to read</u> **Stories without openings.** An automatic sprinkler system shall be installed throughout all buildings, including basements, where the floor area of the story exceeds 1,500 square feet (139 m²) and where the story does not comply with the following criteria for exterior wall openings:
 - 1. Openings below grade that lead directly to ground level by an exterior stairway complying with Section 1011 or an outside ramp complying with Section 1012. Openings shall be located in each 50 linear feet (15 240mm), or fraction thereof, of exterior wall in the story on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm).
 - 2. Openings entirely above the adjoining ground level totaling not less than 20 square feet (1.86 m²) in each 50 linear feet (15 240 mm), or fraction thereof, of exterior wall in the story on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm). The height of the bottom of the clear opening shall not exceed 44 inches (1118 mm) measured from the floor.
- 903.2.11.1.2 <u>Amend this section to read</u> **Openings on one side only.** Where openings in a story are provided on only one side and the opposite wall of such story is more than 75 feet (22 860 mm) from such openings, the building shall be equipped throughout with an approved automatic sprinkler system, or openings shall be provided on not fewer than two sides of the story.
- 903.2.11.1.3 <u>Amend this section to read</u> **Basements.** Where any portion of a basement is located more than 75 feet (22 860 mm) from openings required by Section 903.2.11.1, or where walls, partitions or other obstructions are installed that restrict the application of water from hose streams, the building shall be equipped throughout with an approved automatic sprinkler system.
- 903.2.13 <u>Add a new section to read</u> **Group B or Mixed Occupancies.** An automatic sprinkler system shall be provided throughout all buildings containing Group B or mixed occupancies where one of the following conditions exists:
 - 1. The fire area exceeds 6,000 sq. ft. (577 m²).
 - 2. Where the combined fire areas of Group B and mixed occupancies on all floors including mezzanines and basements is greater than 6,000 sq. ft. (577 m²).

903.2.14 Add a new section to read Buildings Constructed under the International Residential Code. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be provided throughout all multiple (three or more) attached single-family dwellings (townhouses), complying with the requirements of the International Residential Code.

Exception: Unless otherwise required by more restrictive local codes, policies, amendments, ordinances, or plat note.

- 903.3.1.3 <u>Amend this section to read</u> **NFPA 13D sprinkler systems.** Automatic sprinkler systems installed in one-and two-family dwellings; Group R-3; Group R-4, Condition 1; and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D and local codes, ordinances, and policies.
- 903.3.8 <u>Amend this section to read</u> <u>Limited area sprinkler systems</u>. Limited area sprinkler systems as required in the International Residential Code shall be in accordance with the standards listed in Section 903.3.1 except as provided in Sections 903.3.8.1 through 903.3.8.5.
- 903.4 <u>Amend this section to read</u> **Sprinkler system supervision and alarms.** Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

- 1. Automatic sprinkler systems valves, pumps, and tanks in one- and two-family dwellings.
- 4. Jockey pump control valves that are sealed or locked in the open position.
- 6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
- 7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

907.20.6 Amend this section to add Excessive Fire Alarms. An excessive number of false alarms shall be defined as two (2) alarm activations for a fire alarm system within a 60-day period provided that any such activations are not the result of a cause reasonably beyond the control of the owner, tenant or operator of the building. In the event of an excessive number of false alarms, the fire code official may order the building owner, tenant or operator of the building, or party responsible for the building to take reasonable actions necessary to prevent false alarms. These actions may include repair or replacement of the faulty alarm components, addition of tamper proof devices, modification of system design, and repair of other building components which affect alarm system performance. The fire code official may also require the building owner, tenant or operator or party responsible for the building to obtain an approved maintenance contract with a qualified fire alarm maintenance technician as required by NFPA 72 to provide continuous maintenance service of the system.

907.6.6 <u>Amend this section to read Monitoring</u>. Fire protection systems required by this chapter, or by the International Building Code, or by the International Residential Code shall be monitored by an approved supervising station in accordance with NFPA 72.

Exception: Monitoring by a supervising station is not required for:

- 1. Single- and multiple-station smoke alarms required by Section 907.2.10.
- 2. Smoke detectors in Group I-3 occupancies.
- 3. Automatic sprinkler systems in one- and two- family dwellings.
- 915.1 Amend this section to read **General**. Carbon monoxide detection shall be installed in new buildings in accordance with Sections 915.1.1 through 915.6 and in accordance with State Statute. Carbon monoxide detection shall be installed in existing buildings in accordance with Section 1103.9 and in accordance with State Statute.
- 1010.1.9.4 Amend this section to read Locks and latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exist:
 - 1. Places of detention or restraint.
 - 2. In buildings in occupancy Group A having an occupant load of 300 or less than 50, Groups B, F, M and S, and in places of religious worship, the main door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:
 - 2.1. The locking device is readily distinguishable as locked.
 - 2.2. A readily visible, durable sign is posted on the egress side on or adjacent to the door stating:

THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS.

(The sign shall be in letters 1 inch (25 mm) high on a contrasting background.)

- 2.3. The use of the key-operated locking device is revocable by the fire code official for due cause.
- 3. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts does not have a doorknob or surface-mounted hardware.
- 4. Doors from individual dwelling or sleeping units of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key or tool.
- 5. Fire doors after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.
- 6. Doors serving roofs not intended to be occupied shall be permitted to be locked, preventing entry to the building from the roof.
- 1015.8. Window Openings first paragraph ONLY is hereby amended to read as follows 1015.8 Window Openings. Windows in group R2 and R3 buildings including dwelling units, where the top of the sill of an operable window opening is located less than 24 inches above the finish floor and more than 72 inches above the finished grade or other surface below on the exterior of the building, shall comply with one of the following:
- 1031.10 Emergency lighting equipment inspection and testing. Emergency lighting shall be maintained in accordance with Section 1008 and shall be inspected and tested in accordance with Sections 1031.10.1 and 1031.10.2.
- 1103.5 Amend this section to read **Sprinkler systems.** An automatic sprinkler system shall be provided in existing buildings in accordance with Sections 1103.5.1 through 1103.5.5.
- 1103.5.5 <u>Add a new section to read</u> **Additions and alterations to existing buildings.** Existing buildings constructed prior to adoption of this code, with a fire area exceeding 6,000 square feet (577 m²), undergoing additions, alterations or remodel work shall be evaluated under the International Fire Code, for the need for additional fire protection. Portions of buildings separated by approved fire walls as outlined in Chapter 7, Section 707 of the 2012 edition of the International Building Code may be considered as separate buildings.
- 1103.5.5.1 Add a new section to read Existing buildings with a fire area not exceeding 6,000 sq. ft. (577 m²). An automatic sprinkler system shall be provided throughout a building undergoing an addition and/or alteration work whose new aggregate fire area of the building exceeds 5,000 square feet (464 m²).
- 1103.5.5.2 Add a new section to read Existing buildings with a fire area exceeding 6,000 sq. ft. (577 m²). An automatic sprinkler system shall be provided throughout a building undergoing addition work that increases the fire area of the existing building.
- 1103.5.5.3 Add a new section to read **Alterations to existing buildings with a fire area exceeding 6,000 sq. ft. (577 m²).** An automatic sprinkler system shall be provided throughout a building when the area undergoing alterations equals or exceeds 50% of the aggregate fire area of the building.

Exception: Alterations limited to the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using the same materials, elements, equipment or fixtures that serve the same purpose.

- 1103.6.1 <u>Amend this section to read</u> **Existing multi-story buildings.** Existing buildings with occupied floors located more than 40 feet (12192 mm) above the lowest level of fire department access or more than 40 feet (12192 mm) below the highest level of fire department access shall be equipped with standpipes.
- 1103.9 <u>Amend this section to read</u> **Carbon monoxide alarms.** Carbon monoxide alarms shall be installed in existing dwelling units and sleeping units where those units include any of the conditions identified in Sections 915.1 through 915.1.6. The carbon monoxide alarms shall be installed in the locations specified in Section 915.2 and the installation shall be in accordance with Section 915.4.

2403.2.7 <u>Amend this section to read</u> **Welding warning signs**. Welding, cutting and similar spark-producing operations shall not be conducted in or adjacent to flammable vapor areas or dipping or coating operations unless precautions have been taken to provide safety. Conspicuous signs with the following warning shall be posted in the vicinity of flammable vapor areas, dipping operations and paint storage rooms:

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

3103.2 <u>Amend this section to read</u> **Approval required.** Tents and membrane structures having an area in excess of 200 square feet (19 m²) shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the fire code official.

Exception:

- 1. Tents used exclusively for recreational camping purposes.
- 3103.6 <u>Amend this section to read</u> **Construction documents.** A detailed site and floor plan for tents or membrane structures shall be provided with each application for approval. The tent or membrane structure floor plan shall indicate details of the *means of egress* facilities, seating capacity, arrangement of the seating and location and type of heating and electrical equipment. See fire code official for additional local requirements.
- 3105.2 <u>Amend this section to read</u> **Approval.** Temporary special event structures shall not be erected, operated or maintained for any purpose without first obtaining approval and a permit from the fire code official and the building official.
- 5001.1 <u>Amend this section to read</u> **Scope**. Prevention, control and mitigation of dangerous conditions related to storage, dispensing, use and handling of hazardous materials shall be in accordance with this chapter. This chapter shall apply to all hazardous materials, including those materials regulated elsewhere in this code, except that where specific requirements are provided in other chapters, those specific requirements shall apply in accordance with the applicable chapter. Where a material has multiple hazards, all hazards shall be addressed.
 - 1. In retail or wholesale sales occupancies, the quantities of medicines, foodstuff or consumer products and cosmetics containing not more than 50 percent by volume of water-miscible liquids and with the remainder of the solutions not being flammable shall not be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons (5 L).
 - 2. Quantities of alcoholic beverages in retail or wholesale sales occupancies shall not be limited providing the liquids are packaged in individual containers not exceeding 1.3 gallons (5 L).
 - Application and release of pesticide and agricultural products and materials intended for use in weed abatement, erosion control, soil amendment or similar applications where applied in accordance with the manufacturers' instructions and label directions.
 - 4. The off-site transportation of hazardous materials where in accordance with Department of Transportation (DOT) regulations.
 - 5. Building materials not otherwise regulated by this code.
 - 6. Refrigeration systems (see Section 605).
 - 7. Stationary storage battery systems regulated by Section 1206.2.
 - 8. The display, storage, sale or use of fireworks and explosives in accordance with Chapter 56.
 - Corrosives utilized in personal and household products in the manufacturers' original consumer packaging in Group M occupancies.

- 10. The storage of wines in wooden barrels and casks.
- 11. The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids where in accordance with Section 5705.5.
- 5104.2.2 Amend this section to read Aerosol cooking spray products. Storage of aerosol cooking spray products in A, B, E, F, M, and R occupancies shall not be more than 1,000 pounds (454 kg) net weight.
- **5704.2.9.6.1 Locations where above ground tanks are prohibited.** Storage of Class I and II liquid's in above ground tanks I said buildings is prohibited in accordance with local land use code.
- **5704.3.3 Indoor storage.** Storage of flammable and combustible liquid inside buildings containers in portable tank shall be in accordance with sections 5704.4.4.1 through 5704.3.3.10 unless otherwise required by more restrictive local codes, policies, amendments, ordinances, or plat.

Chapter 80 amend this section to read Referenced Standards add NFPA 1—2015 Fire Code Chapter 38. The following appendices will be part of the adoption as amended.

Appendix A is hereby adopted in its entirety:

Appendix B is deleted in its entirety and readopted to read as follows:

APPENDIX B FIRE-FLOW REQUIREMENTS FOR BUILDINGS

SECTION B101 GENERAL

B101.1 Scope. The procedure for determining fire-flow requirements for buildings or portions of buildings hereafter constructed shall be in accordance with this appendix. This appendix does not apply to structures other than buildings.

SECTION B102 DEFINITIONS

- **B102.1 Definitions.** For the purpose of this appendix, certain terms are defined as follows:
- FIRE-FLOW. The flow rate of a water supply, measured at 20 pounds per square inch (psi) (138 kPa) residual pressure, that is available for firefighting.
- FIRE-FLOW CALCULATION AREA. The floor area, in square feet (m²), used to determine the required fire flow.

SECTION B103 MODIFICATIONS

- **B103.1 Decreases.** The fire chief is authorized to reduce the fire-flow requirements for isolated buildings or a group of buildings in rural areas or small communities where the development of full fire-flow requirements is impractical.
- **B103.2 Increases.** The fire chief is authorized to increase the fire-flow requirements where conditions indicate an unusual susceptibility to group fires or conflagrations. An increase shall not be more than twice that required for the building under consideration.
- **B103.3 Areas without water supply systems**. For information regarding water supplies for fire-fighting purposes in rural and suburban areas in which adequate and reliable water supply systems do not exist, the fire code official is authorized to utilize NFPA 1142 or the *International Wildland-Urban Interface Code*.

SECTION B104 FIRE-FLOW CALCULATION AREA

B104.1 General. The fire-flow calculation area shall be the total floor area of all floor levels within the exterior walls, and under the horizontal projections of the roof of a building, except as modified in Section B104.3.

B 104.2 Area separation. Portions of buildings which are separated by fire walls without openings, constructed in accordance with the International Building Code, are allowed to be considered as separate fire-flow calculation areas.

B104.3 Type 1A and Type 1B construction. The fire-flow calculation area of buildings constructed of Type 1A and Type 1B construction shall be the area of the three largest successive floors.

Exception:

Fire-flow calculation area for open parking garages shall be determined by the area of the largest floor.

SECTION B105 FIRE-FLOW REQUIREMENTS FOR BUILDINGS

B105.1 One- and two-family dwellings. The minimum fire-flow requirements for one- and two-family dwellings shall be 1,000 gallons per minute in urban areas and 500 gallons per minute in rural areas.

Exception:

A reduction in required fire flow of 50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system.

B105.2 Buildings other than one- and two-family dwellings. The minimum fire-flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table B105.

TABLE B105

APPLICATION	FIRE FLOW REQUIREMENTS (gpm)	SPACING BETWEEN HYDRANTS (feet) a,b,c	MAXIMUM DISTANCE FROM THE CLOSEST POINT ON A BUILDING TO A HYDRANT (feet)
Commercial	1,500	600	300 ^d
Urban O n e and Two Family Dwelling	1,000	800	400
Rural O n e and Two Family Dwelling	500	800	400

- a. Reduce by 100 feet for dead-end streets or roads.
- b. Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or are arterial streets, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis.
- c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
 - d. For buildings equipped with a standpipe, see Section 507.5.1.1.

B105.3 Water supply for buildings equipped with an automatic sprinkler system.

For buildings equipped with an approved automatic sprinkler system, the water supply shall be capable of providing the greater of:

- The automatic sprinkler system demand, including hose stream allowance.
- 2. The required fire-flow.

SECTION B106 REFERENCED STANDARDS

ICC IBC—15 International Building Code B104.2,

ICC IFC --- 15 International Fire Code Table B105.1(1) & B105.2

ICC IWUIC-15 International Wildland-Urban Interface Code B103.3

ICC IRC --- 15 International Residential Code Table B105.1(1)

NFPA 1142—12 Standard on Water Supplies for Suburban and Rural Fire Fighting

B103.3

Appendix C is deleted in its entirety and readopted to read as follows:

APPENDIX C FIRE HYDRANT LOCATIONS AND DISTRIBUTION

SECTION C101 GENERAL

C101.1 Scope. Fire hydrants shall be provided in accordance with this appendix for the protection of buildings, or portions of buildings, hereafter constructed or moved into the jurisdiction.

SECTION C102 LOCATION

C102.1 Fire hydrant locations. Fire hydrants shall be provided along required fire apparatus access roads and adjacent public streets.

SECTION C103 NUMBER OF FIRE HYDRANTS

C103.1 Fire hydrants available. The number of fire hydrants available to a complex or subdivision shall not be less than that determined by spacing requirements listed in Table B105 when applied to fire apparatus access roads and perimeter public streets from which fire operations could be conducted.

SECTION C104 CONSIDERATION OF EXISTING FIRE HYDRANTS

C104.1 Existing fire hydrants. Existing fire hydrants on public streets are allowed to be considered as available. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads.

SECTION C105 DISTRIBUTION OF FIRE HYDRANTS

C105.1 Hydrant spacing. The average spacing between fire hydrants shall not exceed that listed in Table B105.

Exception:

The fire chief is authorized to accept a deficiency of up to 10 percent where existing fire hydrants provide all or a portion of the required fire hydrant service.

Regardless of the average spacing, fire hydrants shall be located such that all points on streets and access roads adjacent to a building are within the distances listed in Table B105."

Appendix D is deleted in its entirety and readopted to read as follows.

APPENDIX D FIRE APPARATUS ACCESS ROADS

SECTION D101 GENERAL

D10I.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the *International Fire Code*.

SECTION D102 REQUIRED ACCESS

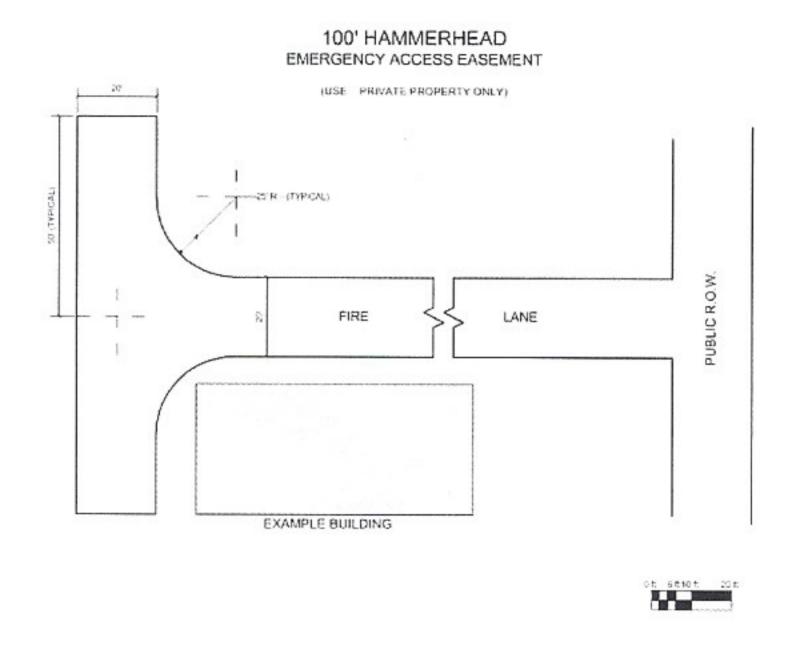
- **D102.1 Access and loading.** Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 80,000 pounds (36,287 kg).
- **D102.2 Access road construction**. All access roadways must be all weather driving surfaces capable of supporting fire apparatus. Surface shall be asphalt, concrete, or compacted road base and engineered for the imposed loads.
- **D102.2.1 Temporary emergency access.** Compacted road base or chip shall only be used for a temporary emergency access. Temporary access shall be available as long as the site is under construction. Thereafter permanent fire lanes shall be accessible and unobstructed at all times.
- **D102.2.2 Permanent emergency access.** All permanent points of access shall be hard decks consisting of asphalt or concrete designed to HS 20 or support 40 tons (36,287 kg). Compacted road base or other surfaces engineered and capable of supporting the imposed loads may be approved for ground mounted solar installations, cell towers and similar isolated facilities and structures when approved by the fire code official.
- **D102.2.2 Installation timing.** All required access roads must be installed and serviceable before aboveground construction begins.

SECTION D103 MINIMUM SPECIFICATIONS

- **D103.1 Access road width with a hydrant.** Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7,925 mm) exclusive of shoulders.
- **D103.2 Grade.** Fire apparatus access roads shall not exceed 10 percent in grade. Exception: Grades steeper than 10 percent as approved by the fire code official. (See section D105.5 for aerial fire apparatus access roads.)
- D103.3 Turning radius. The minimum turning radius shall be 25 feet inside radius and 50 feet outside radius.

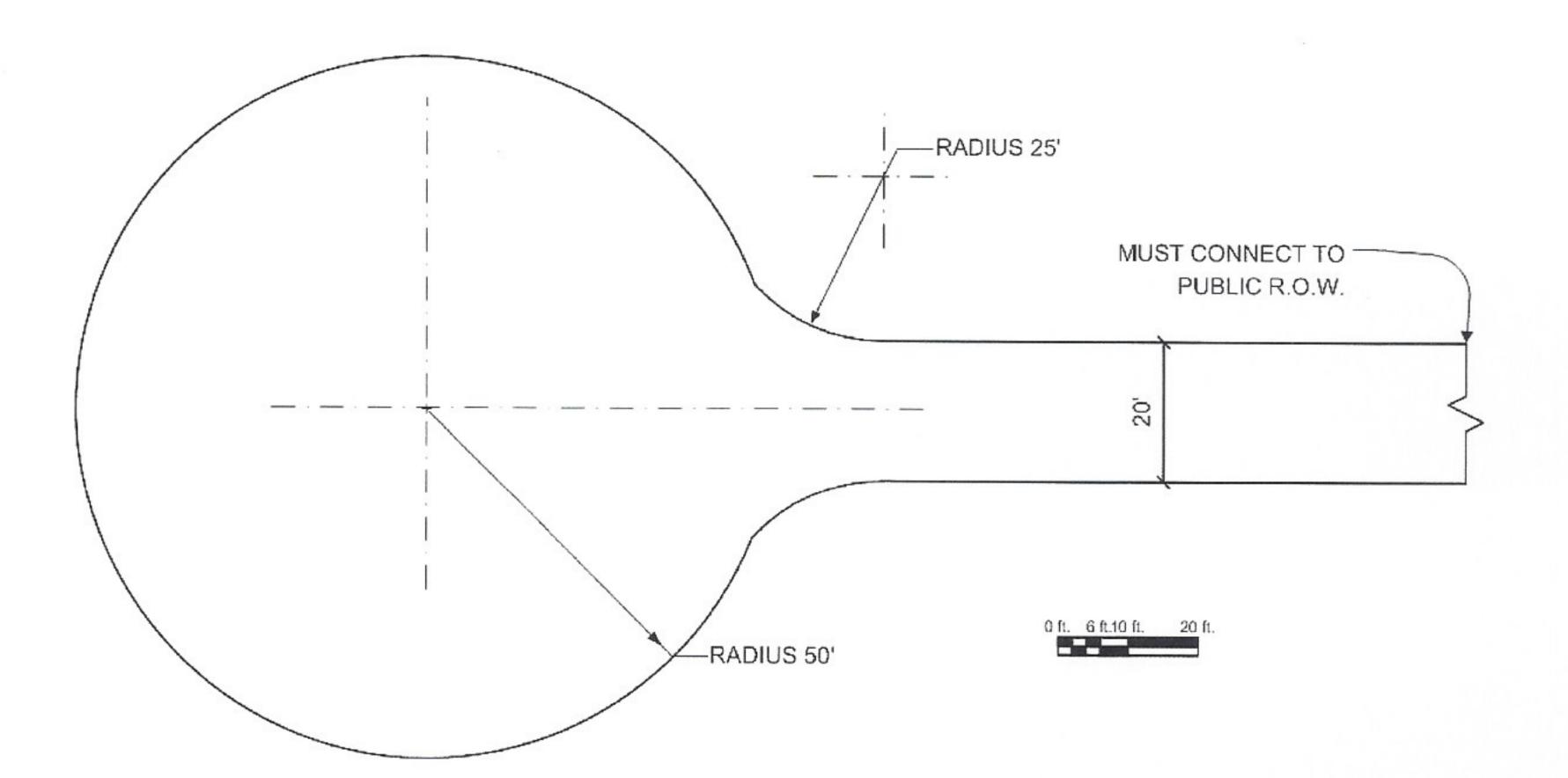
D103.4 Angle of Approach/Departure. Grade changes upon a Fire Apparatus Access Road or when entering or exiting from or to a Fire Apparatus Access Road shall not exceed a 10 percent Angle of Approach or Angle of Departure.

Figure 103.1



100' DIAMETER CUL-DE-SAC

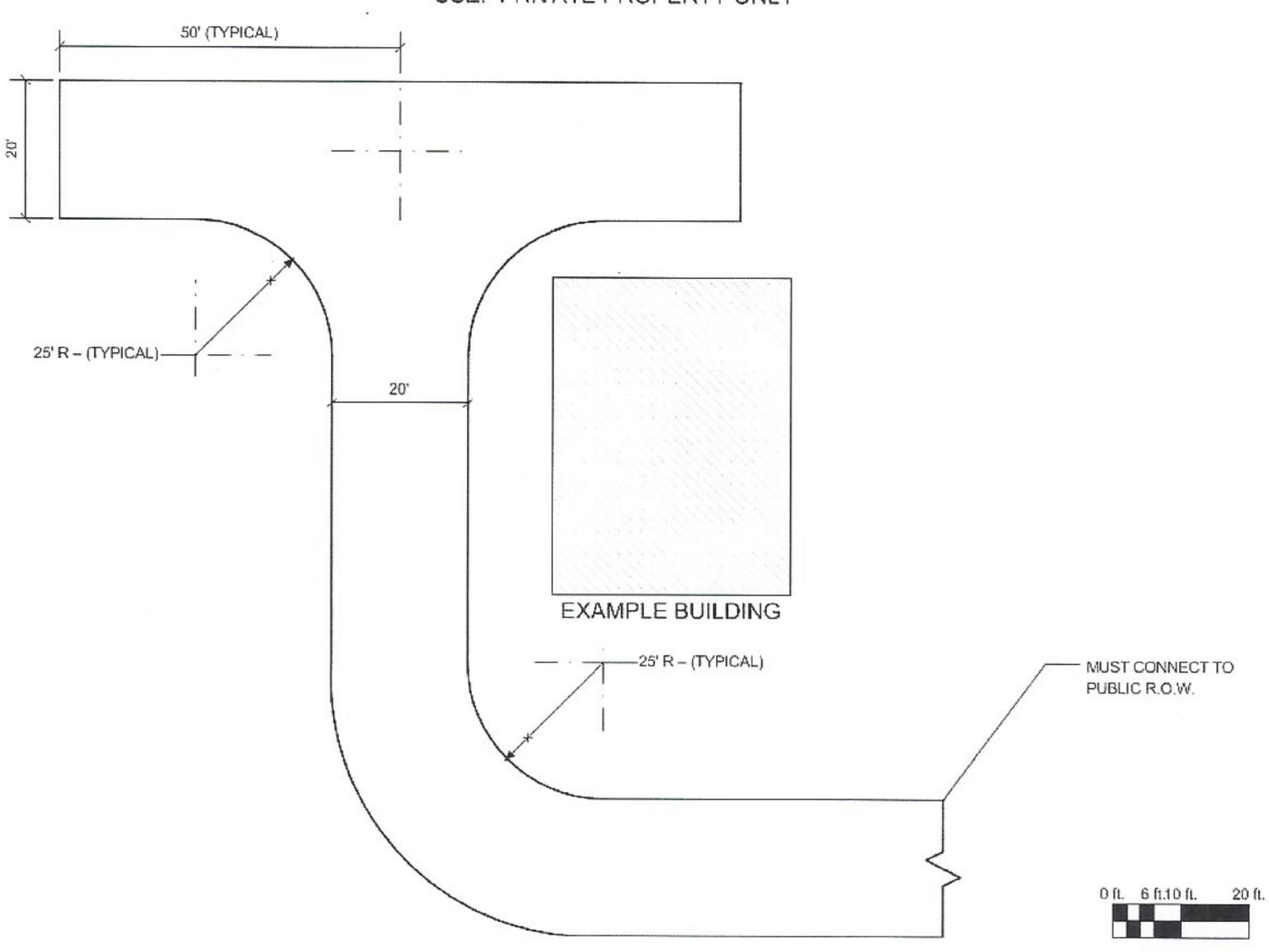
FOR USE ON PUBLIC OR PRIVATE PROPERTY



ALTERNATIVE HAMMERHEAD

EMERGENCY ACCESS EASEMENT (FIRE LANE)

USE: PRIVATE PROPERTY ONLY



D103.5 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (46 m) shall be provided with width and turnaround provisions in accordance with Table D103.4.

TABLE 103.4
REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH(feet)	WIDTH(feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151-660	20	100-foot hammerhead, 100- foot Cul-de-sac in accordance with Figure D103.1
Over 660	Special Approval Required	

D103.5.1 Second Point of Access Required. A second point of access shall be required when the primary access roadway exceeds 660 feet (201 m) in length.

Exception: Where all dwelling units beyond 660 feet (201 m) are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.3, access from two directions shall not be required.

D103.5.2 Third Point of Access Required. A third point of access will be required when any access road exceeds a distance of 1320 feet (1/4 mile) (402 m) in length.

Exception: Where all dwelling units beyond 660 feet (201 m) are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1,903.3.1.2 or 903.3.1.3.3, access from only two directions shall be required.

D103.5.3 Fourth Point of Access Required. A fourth point of access will be required when access road exceeds a distance of 2640 feet (1/2 mile) (804 m) in length.

Exception: Where all dwelling units beyond 660 feet (201 m) are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.3, access from only three directions shall be required.

D103.5.4 Access location. Where two or more points of access are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line.

D103.6 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

- 1. Where a single gate is provided, the gate width shall be not less than 20 feet (6,096 mm). Where a fire apparatus road consists of a divided roadway, the gate shall be not less than 12 feet (3,658 mm).
- Gates shall be of the swinging or sliding type.
- 3. Construction of gates shall be of materials that allow manual operation by one person.
- 4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
- Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.
- 6. Methods of locking the gate shall be approved by the fire code official.
- Manual opening gates shall not be locked with a padlock or chain and padlock unless the padlock is approved by the fire code official and is compatible with the approved Key Boxes in use by the fire department.
- Gate design and locking device specifications shall be submitted for approval by the fire code official prior to installation.
- 9. Electric gate operators, where provided, shall be listed in accordance with UL325.
- Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

D103.7 Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING-FIRE LANE signs complying with Figure D 103.6 or other approved sign. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by section D103.6.1 or D103.6.2.

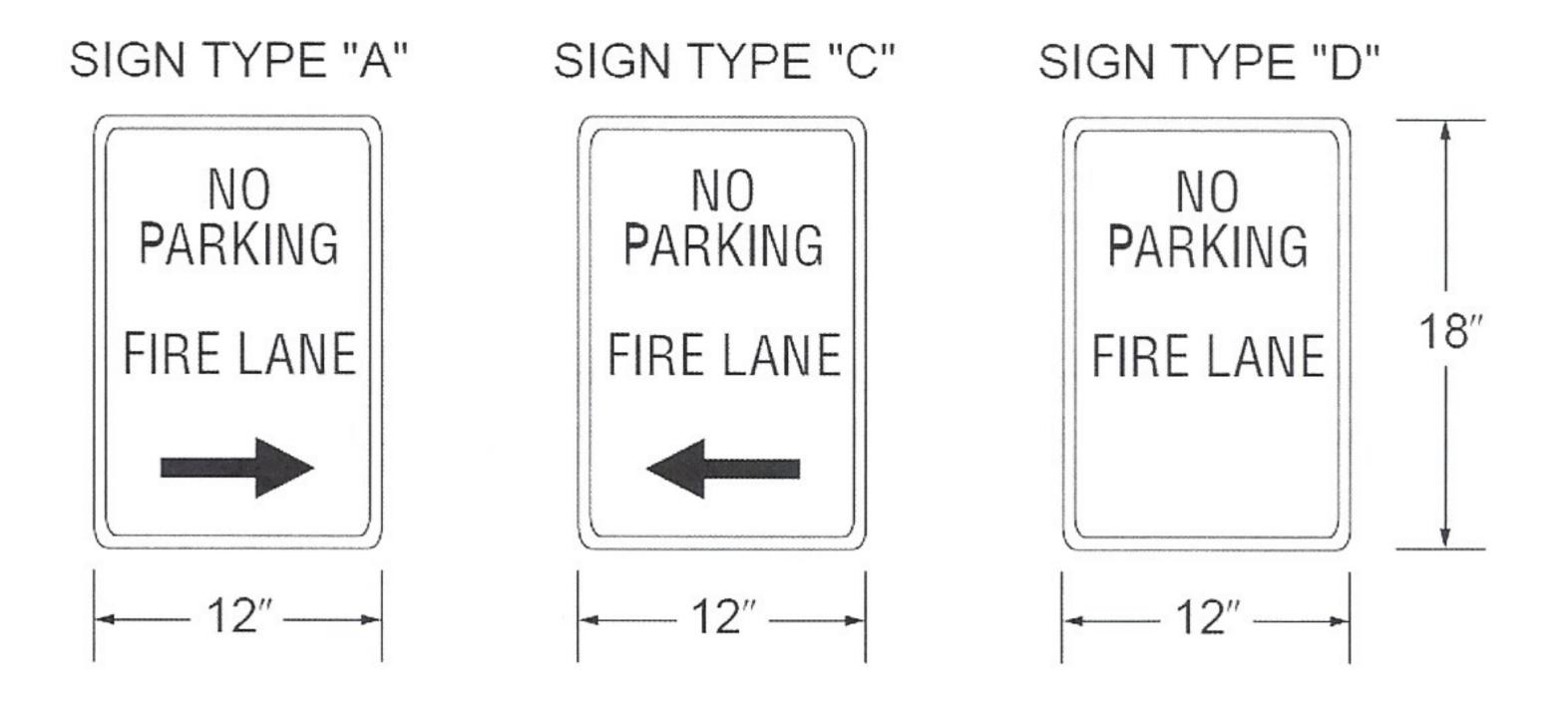


FIGURE D103.6 FIRE LANE SIGNS

D103.7.1 Roads 20 to 26 feet in width. Fire lane signs as specified in D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6,096 to 7,925 mm).

D103.7.2 Roads more than 26 feet in width. Fire lane signs as specified in D103.6 shall be posted on one side of fire apparatus access roads more than 26 feet wide (7,925 mm) and less than 32 feet wide (9,754 mm).

D103.7.2 Minimum Overhead Clearance. Fire access roads shall have a minimum overhead clearance for the entire width of the access road of not less than 14 feet (4,267 mm).

SECTION D 104 COMMERCIAL AND INDUSTRIAL DEVELOPMENTS

D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities exceeding 30 feet (9,144 mm) or three stories in height shall have at least two means of fire apparatus access for each structure.

Exception: Buildings or facilities exceeding 30 feet (9,144 mm) or three stories in height may have a single approved fire apparatus access road when the buildings are equipped throughout with approved automatic sprinkler systems.

D104.2 Buildings exceeding 62,000 square feet in area. Buildings or facilities having a gross building area of more than 62,000 square feet (5,760 m²) shall be provided with two separate and approved fire apparatus access roads.

Exception: Projects having a gross building area of up to 124,000 square feet (II 520m2) that have a single approved fire apparatus access road when all buildings are equipped throughout with approved automatic sprinkler systems."

D104.3 Remoteness. Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

SECTION D105 AERIAL FIRE APPARATUS ACCESS ROADS

D105.1 Where required. Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9,144 mm), approved aerial fire apparatus access roads shall be provided. For purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater.

D105.2 Width. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7,925 mm), exclusive of shoulders, in the immediate vicinity of any building or portion of building more than 30 feet (9,144 mm) in height if the fire access road is not a dead end. Dead end fire apparatus access roads for aerial apparatus access shall be a minimum of 30 feet (9,144 mm) wide.

D105.3 Proximity to building. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4,572 mm) and a maximum of 30 feet (9,144 mm) from the building and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the fire code official.

D105.4 Obstructions. Overhead utility and power lines shall not be located over the aerial fire apparatus access road or between the aerial fire apparatus road and the building. Other obstructions shall be permitted to be placed with the approval of the fire code official.

D105.5 Grade. Aerial fire apparatus access roads adjacent to the building shall not exceed five percent in grade.

SECTION D 106 MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS

D106.1 Projects having more than 100 dwelling units. Multiple-family residential projects having more than 100 dwelling units shall be equipped throughout with two separate and approved fire apparatus access roads.

Exception: Projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with approved automatic sprinkler systems installed in accordance with Section 903.3.1.1.

D106.2 Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system.

SECTION D 107 ONE- OR TWO-FAMILY RESIDENTIAL DEVELOPMENTS

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads and that comply with Section DI03.4.4.

Exceptions: Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.3, access from two directions shall not be required.

The number of dwelling units on a single fire apparatus access road shall not exceed 30 dwelling units unless fire apparatus access roads will connect with future development, as determined by the fire code official.

D108 REFERENCED STANDARDS

ASTM F 2200—05 Standard Specification for Automated Vehicular Gate Construction D103.5 ICC IFC—12 International Fire Code D101.5, D107.1

UL 325—02 Door, Drapery, Gate, Louver, and Window Operators and Systems, with Revisions through February 2006 D103.5

Appendix E is hereby adopted in its entirety:

Appendix E: Hazard Categories - This appendix provides information, explanation and examples to illustrate and clarify hazardous materials.

Appendix F is hereby adopted in its entirety:

Appendix F: Hazard Ranking – This appendix applies hazard rankings to hazardous materials to make them the same as those issued by the Department of Transportation.

Appendix G is hereby adopted in its entirety:

Appendix G: Cryogenic Fluids - Weight & Volume Chart - This appendix is used to convert from liquid to gas for cryogenic fluids.

Appendix H is hereby adopted in its entirety:

Appendix H: Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS) Instructions - This appendix provides guidance on developing a hazardous materials plan.

Appendix I is hereby adopted in its entirety:

Appendix I: Fire Protection Systems – Noncompliant Conditions – This appendix provides guidance on older and out of service fire protection equipment.

Appendix K is hereby adopted in its entirety:

Appendix K: Construction Requirements for Existing Ambulatory Care Facilities – This appendix helps the fire code official assess minimum fire and life safety requirements for buildings containing ambulatory care facilities.

Appendix L is hereby adopted in its entirety:

Appendix N is hereby adopted in its entirety with the following amendment:

Appendix N: Indoor Trade Shows and Exhibitions - This appendix addresses the hazards that are associated with larger, more complex trade shows and exhibitions

N103.3 Amend this section to read N103.3 Crowd managers. Where events involve a gathering of more than 500 people, trained crowd managers shall be provided in accordance with Section 403.12.3.