



Rockwall Fire Prevention, Education, and Investigation Division

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Amendments to the 2021 International Fire Code

The following sections, paragraphs, and sentences of the 2021 International Fire Code (IFC) are hereby amended as follows: Standard type is text from the IFC. <u>Underlined type is text inserted.</u> Lined through type is deleted text from IFC.

Section 101.1; change to read as follows:

101.1 Title. These regulations shall be known as the Fire Code of <u>the City of Rockwall</u>, hereinafter referred to as "this code."

Section 103.1; change to read as follows:

103.1 Creation of Agency. The <u>Rockwall Fire Department Fire Prevention, Education and Investigation</u> <u>Division</u> is hereby created and the official in charge thereof shall be known as the fire code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

Section 105.6; change to read as follows:

105.6 Required Construction Permits. The fire code official is authorized to issue construction permits for work as set forth in Sections 105.6.1 through 105.6.24<u>5</u>.

Section 105.6.25; add to read as follows:

105.6.25 Electronic access control systems. Construction permits are required to install or modify an electronic access control system, as specified in Chapter 10. A separate construction permit is required for to install or modify a fire alarm system that may be connected to the access control system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

Section 112.4; change to read as follows:

112.4 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 provisions of this code, shall be guilty of a Class C Offense, punishable by a fine of not more than [AMOUNT] \$2,000-dollars.-or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Section 202; amend and add definitions to read as follows:

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

Dialysis centers

- Procedures involving sedation
- -Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

[B] <u>**DEFEND IN PLACE.**</u> <u>A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in the second staff to provide occupant safety during an emergency. Emergency response involves remaining in the second staff to provide occupant safety during an emergency. Emergency response involves remaining in the second staff to provide occupant safety during an emergency. Emergency response involves remaining in the second staff to provide occupant safety during an emergency. Emergency response involves remaining in the second staff to provide occupant safety during an emergency. Emergency response involves remaining in the second staff to provide occupant safety during an emergency. Emergency response involves remaining in the second staff to provide occupant safety during an emergency. Emergency response involves remaining in the second staff to provide occupant safety during an emergency.</u>

place, relocating within the building, or both, without evacuating the building.

HIGH-RISE BUILDING. A building with an occupied floor located more than 75 <u>55</u> feet (<u>22 860 16 764</u> mm) above the lowest level of fire department vehicle access.

Section 307.2; change to read as follows:

307.2 Permit Required. A permit shall be obtained from the *fire code official* in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, or <u>open burning a bonfire</u>. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

Section 308.1.6, change to read as follows:

308.1.6 Open-flame devices. Torches and other devices, machines or processes liable to start or cause fire shall not be operated or used in or on wildfire risk areas, except by a permit in accordance with Section 105.5 secured from the *fire code official*.

Exception: unchanged

Section 308.1.6.2, Exception #3; change to read as follows:

3. Torches or flame-producing devices in accordance with Section 308.4 308.1.3.

Section 308.2, change to read as follows:

308.2 Permits Required. Permits shall be obtained from the fire code official in accordance with Section 105.5 prior to engaging in the following activities involving open flame, fire and burning:

- 1. Use of a torch or flame-producing device to remove paint from a structure.
- 2. Use of open flame, fire or burning in connection with Group A or E occupancies.
- 3. Use or operation of torches and other devices, machines or processes liable to start or cause fire in or on wildfire risk areas.

Section 503.2.1; change to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than $\frac{20}{24}$ feet ($\frac{6096 \text{ mm}}{7315 \text{ mm}}$), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than $\frac{13}{15}$ feet 6 inches (4115 mm) $\frac{14}{16}$ feet ($\frac{4267}{10}$ mm).

Section 503.2.3; change to read as follows:

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support imposed loads of <u>85,000 Lbs. for</u> fire apparatus and shall be surfaced so as to provide all-weather driving capabilities in accordance with the City of Rockwall Engineering Standards.

Section 503.2.4; change to read as follows:

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be determined by the fire code official in accordance with the following:

- 1. For buildings less than 30-feet and less than 3 stories in height:
 - a. <u>20-feet (inside) for turns less than or equal to 90 degrees</u>
 - b. 25-feet (inside) for turns greater than 90 degrees
- 2. For buildings 30-feet or more and/or 3 or more stories in height minimum interior turning radius of 30 feet

For purposes of this section, the building height is measured from the lowest finished grade of the fire access roads to the point of accessible roof level, including parapet walls. For buildings with pitched roofs, the height is measured to the roof plate.

Section 503.2.7; change to read as follows:

503.2.7 Grade. The grade of the fire apparatus access road shall be within the limits established by the fire code official based on the fire department's apparatus. not exceed 10% in grade change, with cross slope not exceeding 5% or as approved by the Fire Chief.

Section 503.2.8; change to read as follows:

503.2.8 Angles of approach and departure. The angles of approach and departure for fire apparatus access roads shall be within the limits established by the fire code official based on the fire department's apparatus shall not exceed 7 Degrees, (or 12 %) or as approved by the Fire Chief.

Section 505.1; change to read as follows:

505.1 Address Identification. New and existing buildings 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 Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) 12 inches (304.8 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road, buildings do not immediately front a street, and/or the building cannot be viewed from the public way, a monument, pole or other sign with approved 12 inch (304.8 mm) height building numerals or addresses and 4 inch (101.6 mm) height suite/apartment numerals of a color contrasting with the background of the building or other approved means shall be used to identify the structure. Numerals or addresses shall be posted on a minimum 20 inch (508 mm) by 30 inch (762 mm) background on border. Address identification shall be maintained.

Exception: Structures locate within the historic district may utilize a minimum of 6 inches (152.4 mm) high numbers as approved by the Fire Code Official.

Section 506.1; change to read as follows:

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, The fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type listed in accordance with UL 1037, and shall contain keys to gain necessary access as required by the fire code official. An approved key box shall be provided on the following structures:

1. On new and existing structures at fire sprinkler riser/fire pump rooms, if one is provided, and at additional locations as required by the Fire Code Official.

2. On all existing commercial structures comprised of multiple tenant spaces. A single approved Key Box may serve multiple occupancies in a single building provided the box is located in an approved location and is adequately sized for the number of keys.

Section 507.1; add a new paragraph to read as follows:

507.1 Required water supply. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

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. Existing fire hydrants on public streets are allowed to be considered as available where streets are not provided with median dividers which cannot be crossed by fire fighters pulling hose lines.)

Section 507.4; change to read as follows:

507.4 Water Supply Test Date and Information. The water supply test used for hydraulic calculation of fire protection systems shall be conducted in accordance with NFPA 291 "Recommended Practice for Fire Flow Testing and Marking of Hydrants" and within one year of sprinkler plan submittal. The fire code official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the fire code official or approved documentation of the test shall be provided to the fire code official prior to final approval of the water supply system. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings. All fire protection plan submittals shall be accompanied by a hard copy of the waterflow test report, or as approved by the fire code official. The report must indicate the dominant water tank level at the time of the test and the maximum and minimum operating levels of the tank, as well, or identify applicable water supply fluctuation. The licensed contractor must then design the fire protection system based on this fluctuation information, as per the applicable referenced NFPA

standard. Reference Section 903.3.5 for additional design requirements.

Section 507.5.1.2; add new section to read as follows:

507.5.1.2 Location. Fire hydrants shall be located within 6 ft. of the edge of the pavement unless the fire department determines another location is acceptable for fire department use.

Section 507.5.1.3; add new section to read as follows:

507.5.1.3 Intersections. Fire hydrants shall be at every street intersection, or as otherwise required by the fire code official.

Section 509.1.2; add to read as follows:

509.1.2 Sign Requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of 2 inches (50.8 mm) when located inside a building and 4 inches (101.6 mm) when located outside, or as approved by the *fire code official*. The letters shall be of a color that contrasts with the background.

Section 605.4 through 605.4.2.2 ; change to read as follows:

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

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

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

605.4.2 Fuel oil storage inside buildings. Fuel oil storage inside buildings shall comply with Sections 605.4.2.2 through 605.4.2.8 or <u>and</u> Chapter 57.

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

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

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

Section 903.2 remains unamended from previous code adoption per Ordinance 11-24

903.2 Where Required. Approved automatic fire sprinkler systems shall be installed in all new buildings, structures and additions with a fire flow calculation area of 5,000 square feet (464.5 m2) or greater and in all existing buildings, not including R-3, that are enlarged to have a fire flow calculation of 5,000 square feet (464.5 m2) or greater and in buildings that have a fire flow calculation greater than 5,000 square feet (464.5 m2) which are enlarged and all locations described in this section.

Approved automatic fire sprinkler systems shall be installed in all new R-3 buildings, structures and additions with a finished floor area of 5,000 square feet (464.5 m2) or greater and in all existing R-3 occupancies that have additions totaling more than 30% of the original finished floor area and exceeding a finished floor area of 5,000 square feet.

For the purpose of this provision, fire walls shall not define separate buildings.

Exceptions:

- 1. Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic fire alarm system and are separated from the remainder of the building by fire barriers consisting of not less than 1-hour fire-resistance-rated walls and 2-hour fire-resistance-rated floor/ ceiling assemblies.
- 2. Group U
- 3. Temporary structures other than amusement buildings.
- 4. Group A-5, except as required by 903.2.1.5.
- 5. Open parking garages in compliance with Section 406.3 of the International Building Code, when all of the following conditions apply:
 - *i.* The structure is non-combustible construction.
 - ii. The structure has no other types of occupancies located above or below it.
 - *iii.* The structure does not contain any mixed uses, accessory uses, storage rooms, electrical rooms or spaces used or occupied for anything other than motor vehicle parking.
 - iv. The structure does not exceed 3 stories.
 - v. The structure has two complete sides unobstructed for fire department access by roadway or fire lane.

Section 903.2.9.5; add to read as follows:

903.2.9.5 Self-Service Storage Facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

Exception: Self-service storage facilities not greater than one story above grade plane that have no interior corridors and are less than 5,000 square feet.

Section 903.2.10; change to read as follows:

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

- 1. Where the fire area of the enclosed parking garage, in accordance with Section 406.6 of the International Building Code, exceeds 12,000 square feet (1115 m2) is 5,000 square feet or greater.
- Where the enclosed parking garage, in accordance with Section 406.6 of the International Building Code, is located beneath other groups.
 Exception: Enclosed parking garages located beneath buildings <u>that do not contain more than</u> two dwelling units Group R-3 occupancies.
- 3. Where the fire area of the open parking garage, in accordance with Section 406.5 of the International Building Code, exceeds 48,000 square feet (4460 m2).

Section 903.3.1.2.2; change to read as follows:

903.3.1.2.2 Corridors and balconies in the means of egress. Sprinkler protection shall be provided in <u>all</u> corridors and for <u>all</u> balconies. in the means of egress where any of the following conditions apply: *{Delete the rest of this section.}*

Section 903.3.1.3; change to read as follows:

903.3.1.3 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 <u>or in accordance with state law.</u>

Section 903.3.1.4; add to read as follows:

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

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

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

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

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

Section 903.3.5; add a second paragraph to read as follows:

<u>Water supply as required for such systems shall be provided in conformance with the supply</u> requirements of the respective standards; however, every water-based fire protection system shall be designed with a 5psi safety factor. Reference Section 507.4 for additional design requirements.

Section 903.4.2; add 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.

*Section 903.4.3; change to read as follows:

Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor in high-rise-buildings.

Section 904.3.5; change to read as follows:

904.3.5 Monitoring. Where a building fire alarm system <u>or a dedicated function fire alarm system</u> is installed, automatic fire-extinguishing systems shall be monitored by the building fire alarm system <u>or the dedicated function fire alarm system</u> in accordance with NFPA 72.

Section 905.3; change to read as follows:

905.3 Required Installations. Standpipe systems shall be installed where required by Sections 905.3.1 through 905.3.8<u>9</u>. Standpipe systems are allowed to be combined with automatic sprinkler systems.

Exception: Standpipe systems are not required in Group R-3 occupancies.

Section 905.3.9; add Section 905.3.9 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 having any portion of the building's interior area more than 200 feet (60960 mm) of travel, vertically or horizontally, from the nearest point of fire department vehicle access, Class I standpipes shall be provided.

Section 905.4; change Item #2 to read as follows:

905.4 Location of Class 1 standpipes hose connections.

Class I standpipe hose connections shall be provided in all of the following locations:

- 1. {No Change}
- 2. On each side of the wall adjacent to the exit opening of a horizontal exit.

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

Where all floor areas are reachable from an exit stairway hose connection on the same side of a horizontal exit within 200 ft (61 m) for sprinklered buildings or 130 ft (39.7 m) for nonsprinklered buildings, the hose connection on the other side of the horizontal exit shall be permitted to be omitted.

- 3. {No Change}
- 4. {No Change}
- 5. {No Change}
- 6. {No Change}

Section 907.6.1.1; add to read as follows:

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

Section 907.6.3; change to read as follows:

Section 907.6.3 Initiating device identification. The fire alarm system shall identify the specific initiating device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, as appropriate.

Exceptions:

- 1. Fire alarm systems in single-story buildings less than 22,500 square feet (2090 m2) in area.
- 2. Fire alarm systems that only include manual fire alarm boxes, waterflow initiating devices and not more than 10 additional alarm-initiating devices.
- 3. Special initiating devices that do not support individual device identification.
- 4. Fire alarm systems or devices that are replacing existing equipment.

Section 912.2.1.1; add to read as follows:

912.2.1.1 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.

912.2.1.2; add to read as follows:

912.2.1.2 Fire apparatus access roadway distance. An approved Fire apparatus access roadway shall be located within 50 feet of the fire department connection as the fire hose lays along an unobstructed path

Section 5601.1.3; change to read as follows:

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

Exceptions:

- 1. Storage and handling of fireworks as allowed in Section 5604.
- 2. Manufacture, assembly and testing of fireworks as allowed in Section 5605.
- 3. The use of fireworks for fireworks displays as allowed in Section 5608-
- 4. The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided that such fireworks and facilities comply with the 2006 edition of NFPA 1124, CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR Parts 100–185, as applicable for consumer fireworks.

Section 5704.2.9.6.1 (geographic limits in which the storage of Class I and Class II liquidsin above-ground tanks outside of buildings is prohibited): [JURISDICTION TO SPECIFY]

5704.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited otherwise by <u>City of Rockwall Ordinance</u>.

Section 5706.2.4.4 (geographic limits in which the storage of Class I and Class II liquidsin above-ground tanks is prohibited): [JURISDICTION TO SPECIFY]

5706.2.4.4 Locations where above-ground tanks are prohibited. The storage of Class I andII liquids in above-ground tanks is prohibited within the limits established by law as the limits of districts in which such storage is prohibited otherwise by <u>City of Rockwall Ordinance</u>.

Section 5806.2 (geographic limits in which the storage of flammable cryogenic fluids in stationary containers is prohibited): [JURISDICTION TO SPECIFY]

5806.2 Limitations. Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited otherwise by <u>City of Rockwall Ordinance</u>.

Appendix D, Section D102.1; change to read as follows:

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 up to 75,000 pounds (34 050 kg) <u>85,000 pounds (38 555 kg) in accordance with the City of Rockwall Engineering Standards.</u>

Appendix D, Section D103.1; change to read as follows:

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 (7925 mm) <u>24 feet</u>, exclusive of shoulders (see Figure D103.1).

Appendix D, Section D103.2; change to read as follows:

D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade <u>and 5 percent in</u> <u>cross slope.</u>

Exception: Grades steeper than 10 % as approved by the Fire Code Official.

Appendix D, Section D103.3; change to read as follows:

D103.3 Turning radius. The minimum turning radius shall be determined by the Fire Code Official <u>and in</u> <u>accordance with the following:</u>

- 1. For buildings less than 30-feet and less than 3 stories in height:
 - a. 20-feet (inside) for turns less than or equal to 90 degrees
 - b. <u>25-feet (inside) for turns greater than 90 degrees</u>
- 2. For buildings 30-feet or more and/or 3 or more stories in height minimum interior turning radius of 30 feet

For purposes of this section, the building height is measured from the lowest finished grade of the fire access roads to the point of accessible roof level, including parapet walls. For buildingswith pitched roofs, the height is measured to the roof plate.

Appendix D, Section D103.4; change to read as follows:

D103.4 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4.

TABLE D103.4 REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH	WIDTH	TURNAROUNDS REQUIRED
(feet)	(feet)	
0–150	20 <u>24</u>	None required
151–500	20 <u>24</u>	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
501–750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
Over 750	Special approval required	
For SI: 1 foot = 304.8 mm.		

For SI: 1 foot = 304.8 mm.

Appendix D, Section D103.5; change Item 1 to read as follows:

D103.5 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 (6096 mm). Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet (3658 mm). Gates shall not obstruct the required minimum required widths of the fire apparatus access roadway.
- 2. 8. remain unchanged

Appendix D, Section D103.6; change to read as follows:

D103.6 Signs. Marking. Striping, signs, or other markings, when approved by the fire code official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Striping, signs and other markings shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

(1) Striping – Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

(2) Signs – Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high (See Figure D103.6). Signs shall have red letters on a white reflective background, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

Where required by the fire code official, fire apparatus access roads shall be marked with permanent "NO PARKING—FIRE LANE" signs complying with Figure D103.6, or other approved method. 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.



Appendix D, Section D103.6.1 and D103.6.2; delete sections as follows: D103.6.1Roads 20 to 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6096 to 7925 mm). D103.6.2 Roads more than 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on one side of fire apparatus access roads more than 26 feet wide (7925 mm) and less than 32 feet wide (9754 mm).

Appendix D, Section D104.3; change to read as follows:

D104.3 Remoteness. Where two fire apparatus 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, or as *approved* by the *fire code official*.

Appendix D, Section D105.2; change to read as follows:

D105.2 Width. Aerial fire apparatus access roads shall have a minimum unobstructed width of <u>26 24</u> feet (7925 mm), exclusive of shoulders, in the immediate vicinity of the building or portion thereof.

Appendix D, Section D105.3; change to read as follows:

D105.3 Proximity to building. <u>Unless otherwise approved by the fire code official</u>, one or more of the required access routes meeting this condition shall be located not less than 15 feet (4572 mm) and not greater than 30 feet (9144 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*.

Appendix D, Section D106.3; change to read as follows:

D106.3 Remoteness. Where two fire apparatus 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 property or area to be served, measured in a straight line between accesses, or as *approved* by the *fire code official*.

Appendix D, Section D107.2; change to read as follows:

D107.2 Remoteness. Where two fire apparatus 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 property or area to be served, measured in a straight line between accesses, or as *approved* by the *fire code official*.

Appendix L, Section L101.1; change to read as follows:

Section L101.1 Scope. Fire fighter air replenishment systems (FARS) shall be provided in accordance with this appendix in new buildings when any of the following conditions occur:

<u>1. Any new building 5 or more stories in height above the lowest level of fire department vehicle access.</u>

2. Any new building with 2 or more floors below grade.

3. Any new building 500,000 square feet or more in size.

Each stairwell shall have a supply riser. SCBA fill panels shall be located on odd numbered floors commencing at the first level in the primary stairwell and on even numbered floors commencing at level 2 in the remaining stairwells. Fill panels in buildings over 500,000 square feet shall be located adjacent to each standpipe connection.

The adopting ordinance shall specify building characteristics or special hazards that establish thresholds triggering a requirement for the installation of a FARS. The requirement shall be based on the fire department's capability of replenishing fire fighter breathing air during sustained emergency operations. Considerations shall include:

1. Building characteristics, such as number of stories above or below grade plane, floor area, type of construction and fire-resistance of the primary structural frame to allow sustained fire-fighting operations based on a rating of not less than 2 hours.

2. Special hazards, other than buildings, that require unique accommodations to allow the fire department to replenish fire fighter breathing air.

3. Fire department staffing level.

4. Availability of a fire department breathing air replenishment vehicle.

Appendix L, Section L104.13.1; delete this section in its entirety.

Appendix L, Section L104.14; add paragraph to read as follows:

The external mobile air connection shall be located with approved separation from the Fire Department Connection (FDC) to allow functionality of both devices by first responders; shall be visible from and within 50 ft. of a fire apparatus access road along an unobstructed path; and shall be located in an approved signed, secured cabinet.

END

