

**RESOLUTION 2022-02
POUDRE VALLEY FIRE PROTECTION DISTRICT
BOARD OF DIRECTORS
ADOPTING A FIRE PREVENTION CODE**

Be it resolved by the Board of Directors of the Poudre Valley Fire Protection District:

Section 1, Adoption of the International Fire Code, 2021 Edition.

Pursuant to the authority conferred upon the Poudre Valley Fire Protection District ("District") by Sections 32-1-1001 and 32-1-1002, C.R.S., of the Special District Act, and the laws of the State of Colorado, there is hereby adopted by the District's Board of Directors ("Board"), for the purposes of safeguarding 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, the International Fire Code, 2021 Edition ("this fire code"), as promulgated by the International Code Council. Except as to any portion of this fire code that is herein-after added to, deleted, modified, or amended in this Resolution, this fire code shall include all articles and appendices in the International Fire Code, 2021 Edition. Not less than three (3) copies of this fire code shall be on file in the office of the District's Fire Marshal and may be inspected at regular business hours and purchased from the Fire Prevention Bureau at a price not to exceed one hundred dollars (\$100.00) per copy. The provisions of this fire code shall be controlling within the District's jurisdictional boundaries.

Section 2, Amendments, Additions, and Deletions

The following articles, sections, divisions, subsections, and appendices of the International Fire Code, 2021 Edition, are hereby added, amended, deleted, modified, and renumbered, except as noted, to read as follows:

- (1) Section 101.1 Title is hereby amended to read as follows:

101.1 Title. These regulations shall be known as the *Fire Code* of the Poudre Valley Fire Protection District, hereinafter referred to as "this code".

- (2) Section 103.1 Creation of Agency is hereby amended to read as follows:

103.1 Creation of Agency. Pursuant to Section 1.2 of the July 15, 2014 Intergovernmental Agreement establishing the Poudre Fire Authority ("PFA" or "fire department"), the District has granted PFA the power and authority to enforce this code, and, in conjunction with Section 32-1-1002(3), C.R.S, PFA's Fire Chief, directly or through delegation to PFA's Fire Marshal, and the official in charge thereof shall be known as the *fire code official*. The function of PFA shall be the implementation, administration, and enforcement of the provisions of this code.

- (3) Section 104.7 Liability is hereby amended to read as follows:

104.7 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 liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property because of an act or by reason of an act or omission in the discharge of official duties, unless such act or omission is

determined by a Court of competent jurisdiction to be willful and wanton, as provided in the Colorado Governmental Immunity Act, CRS Section 24-10-101 *et seq.*

104.7.1 Legal defense. Any suit instituted against any officer or employee because of an act or omission performed by that officer or employee in the lawful discharge of duties and under the provisions of this code, unless such act or omission is determined by a Court of competent jurisdiction to be willful and wanton, as provided in the Colorado Governmental Immunity Act, CRS Section 24-10-101 *et seq.*, shall be defended by the 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 fire prevention bureau, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of any act or omission in the performance of official duties in connection therewith.

(4) Section 111.1 Board of Appeals established is hereby amended to read as follows:

111.1 Board of appeals established. In order to hear and decide appeals of orders, decisions or determinations made by the *fire code official* relative to the application and 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 Larimer County Building Review Board, as appointed from time to time, shall constitute the Fire Board of Appeals. The *fire code official* shall be an *ex officio* member of said board but shall have no vote on any matter before the board. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *fire code official*. This section shall not be applicable to the appeal of fees or fine amounts, which shall be appealed to PFA's Fire Chief pursuant to established policies in accordance with Section 113.4 of this Code.

(5) Section 111.3 is hereby deleted in its entirety.

(6) Section 112.4 Violation penalties is hereby amended 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 subject to prosecution by the Larimer County District Attorney pursuant to the County's Code.

(7) Section 112.5 Work commencing before permit issuance is hereby added to read as follows:

112.5 Work commencing before permit issuance. In addition to penalties 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, 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 fee shall be equal to the permit fee, except that such fee shall not be less than \$50 or more than \$1,000 for the first such violation. A person or firm committing the same such violation repeatedly is subject to processing and penalty fees equal to double the amount of the permit fee or double the amount of the preceding violation, whichever is greater, for every same such subsequent violation committed thereafter within any 180-day period.

- (8) A new Section 115 Reporting of emergencies and false alarms is hereby added to read as follows:

SECTION 115 – Reporting of emergencies and false alarms

115.1 General. Reporting of fires and hazardous materials releases shall be in accordance with Section 115.

115.2 Reporting Emergencies. In the event a fire occurs or the discovery of a fire, smoke, or unauthorized release of flammable, combustible, or hazardous materials on any property occurs, the owner, owners authorized representative, or occupant shall, without delay, report such condition to the fire department.

115.3 False Alarms. False alarms shall not be given, signaled, or transmitted or caused or permitted to be given, signaled, or transmitted in any manner.

- (9) Section 202, DEFINITIONS, is hereby amended to modify, or add, in alphabetical order, the following definitions:

BARREL. A charred wooden process vessel made of bent staves held together with steel hoops, with the greatest diameter being at the center of the staves, known as the “bilge”. Ends, known as “heads”, are flat, and the rim formed by staves overlapping the heads is known as the “chime”.

CASK. See “Barrel”.

PUZZLE ROOM. A puzzle room is a type of *special amusement area* in which occupants are encouraged to solve a challenge to escape from a room or series of rooms.

- (10) A new Section 307.2.2 Time and Atmospheric Restrictions is hereby added and reads as follows:

307.2.2 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.

- (11) Section 307.4.1 Bonfires is hereby amended and reads in its entirety as follows:

307.4.1 Bonfires. Bonfires are prohibited unless specifically approved and permitted by the *fire code official*.

- (12) Section 307.4.2 Recreational fires is hereby amended to read as follows:

307.4.2 Recreational fires. *Recreational fires* shall not be conducted within 25 feet (7,620mm) of a structure or combustible material. Conditions that could cause a fire to spread within 25 feet (7,620mm) of a structure shall be eliminated prior to ignition. *Recreational fires* must be approved prior to ignition and shall have a permit as required in accordance with Section 307.2.

- (13) Section 307.4.3 Portable outdoor fireplaces is hereby amended to read as follows:

307.4.3 Portable and Fixed Outdoor Fireplaces. Portable and fixed outdoor fireplaces, including fire tables, shall be used in accordance with the manufacturer’s instructions. Outdoor

fireplaces for public use shall be listed for commercial use. Outdoor fireplaces shall not be placed closer to combustibles than stated in the manufacturer's instructions. If the manufacturer's instructions are not available or do not establish a distance, they shall not be operated within 15 feet (4572 mm) of a combustible structure or combustible material. Outdoor fireplaces shall not be operated underneath a combustible structure of any type. Outdoor fireplaces shall be gas or liquid fueled unless otherwise approved by the fire code official.

Exception: Outdoor fireplaces at one and two-family dwellings may use *approved* solid fuels.

- (14) Section 308.1.6.3 Sky lanterns is hereby amended to read as follows:

308.1.6.3 Sky lanterns. The use of sky lanterns, tethered or untethered, is prohibited.

- (15) Section 503.1 Where required is hereby amended to read as follows:

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3 and Appendix D Fire Apparatus Access Roads.

- (16) Section 503.2 Specifications is hereby amended to read as follows:

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8 and Appendix D Fire Apparatus Access Roads.

- (17) Section 503.2.1 Dimensions is hereby amended to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for *approved* security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 14 feet (4267 mm).

- (18) Section 503.2.4 Turning radius is hereby amended to read as follows:

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be 25 feet (7.6 m) inside radius and 50 feet (15.2 m) outside radius.

- (19) Section 503.2.7 Grade is hereby amended to read as follows:

503.2.7 Grade. The grade of the fire apparatus access road shall not exceed 10 percent in grade.

Exception: Where approved by the *fire code official*, grades steeper than 10 percent due to geographic or location conditions shall be permitted.

- (20) Section 503.2.8 Angles of approach and departure is hereby amended to read as follows:

503.2.8 Angles of approach and departure. The angles of approach and departure when entering or exiting fire apparatus access roads shall not exceed a 10 percent angle of approach or departure.

(21) Section 503.6 Security gates is hereby amended to read as follows:

503.6 Security gates. The installation of security gates across a fire apparatus road shall be approved by the *fire code official*. Where security gates are installed, they shall have an *approved* means of emergency operation and shall comply with the requirements of Appendix D 103.6.

(22) Section 505.1 Address identification is hereby amended to read as follows:

Section 505.1 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 Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Address identification shall be maintained.

505.1.1 Addresses shall be assigned by the governmental entity having jurisdiction (Fort Collins, Timnath, or Larimer County) and shall comply with the Larimer County Street Naming and Addressing Standards as contained in the Larimer County Urban Area Street Standards. The *approved* address numbers and letters shall be visible from the street fronting the property and posted on a contrasting background.

505.1.2 The address numbers and letters for any commercial or industrial buildings shall be placed at a height to be clearly visible from the street. The minimum height and stroke shall be in accordance with Table 505.1.3

Table 505.1.3

<u>Distance from street curb to building</u>	<u>Letter/number size</u>
<u>1 – 100 feet</u>	<u>8 inches¹</u>
<u>101 – 150 feet</u>	<u>10 inches¹</u>
<u>151 – 200 feet</u>	<u>12 inches¹</u>
<u>201 – 350 feet</u>	<u>14 inches²</u>
<u>351 – 500 feet</u>	<u>16 inches²</u>
<u>501 – 700 feet</u>	<u>20 inches²</u>
<u>In excess of 700 feet</u>	<u>As approved by the <i>Fire Code Official</i>³</u>

¹ 8"– 12" numbers shall be a minimum 1" stroke

² 13"– 20" numbers shall be a minimum 1 ½" stroke

³ 21" and larger shall have proportional strokes to ensure visibility

505.1.4 The *address* numbers and letters for one- and two-family dwellings shall be a minimum of four inches in height with a minimum ½" stroke and shall be posted on a contrasting background. If bronze or brass numerals are used, they shall only be posted on a black background for visibility.

505.1.5 Monument signs may be used in lieu of address numbers and letters on the building as approved by the *fire code official*.

505.1.6 Buildings with multiple suites, apartments or units shall have the individual suites, apartments or units provided with individual identification numbers in sequential order.

1. Suite identifiers accessed from the exterior of the building shall be a minimum of four inches in height with a minimum ½” stroke.

2. Suite identifiers accessed from the interior of the building shall be a minimum of two inches in height with a minimum ¼” stroke.

3. Suites, apartments, or units located on the first floor shall be identified by numbers within the 100 or 1000 range or series; Suites, apartments or units located on the second floor shall be identified by numbers within the 200 or 2000 range or series; Suites, apartments or units located on the third floor shall be identified by numbers within the 300 or 3000 range or series. Higher floors shall follow this same numbering sequence.

505.1.5 Buildings, either individually or part of a multi-building complex, that have emergency access lanes on sides other than on the addressed street side, shall have the address numbers and street name on each side that fronts a fire lane.

505.1.8 Buildings that are addressed on one street but are accessible from another street, shall have the address numbers and street name on each side that is adjacent to another street.

505.1.9 *Approved* wayfinding signage shall be provided in conspicuous locations within buildings to provide clear direction to locate any suite, apartment, or unit within the building. Interior wayfinding signage shall be a minimum of two inches in height with a minimum ¼” stroke.

505.1.10 Multiple-building complexes shall be provided with *approved* signage as needed to direct first responders to individual buildings.

505.1.11 Multiple-building complexes that have a single street address for the entire complex shall utilize alpha or numeric characters to identify the individual buildings. Such identification shall be assigned to the buildings in a sequential order following a clockwise direction starting at the main entrance to the complex.

(23) Section 507.2 Type of water supply is hereby amended to read as follows:

507.2 Type 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 fire flow.

(24) Section 507.5 Fire hydrant systems is hereby amended to read as follows:

507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6 and Appendix C Fire Hydrant Locations and Distribution.

507.5.1 Where required. Where a facility or building hereafter constructed or moved into or

within the jurisdiction is more than 300 feet (91 m) from a hydrant on a fire apparatus access road, as measured by an *approved* route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the *fire code official*.

Exception: For Group R-3 one and two-family dwellings and Group U occupancies, the distance requirement shall be 400 feet (121 m).

- (25) A new subsection 607.5 Solid-fuel fired cooking appliances is hereby added and reads as follows:

606.5 Solid-fuel fired cooking appliances. Solid-Fuel Commercial Cooking Appliances shall comply with applicable provisions of National Fire Protection Association (NFPA) 96.

- (26) Section 901.4.6.1 Access is hereby amended to read as follows:

901.4.6.1 Access. Automatic sprinkler system risers, fire pumps and controllers shall be provided with ready access. Where located in a fire pump room or automatic sprinkler system riser room, the door shall be permitted to be locked provided that the key is available at all times. The clear door opening shall be 32 inches wide and 80 inches high, or a size large enough to accommodate the largest piece of equipment, whichever is larger.

- (27) Section 903.2.1.1 Group A-1 is hereby amended to read as follows:

903.2.1.1 Group A-1. An *automatic sprinkler system* shall be provided throughout stories containing Group A-1 occupancies and throughout all stories from the Group A-1 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The *fire area* exceeds 5,000 square feet (464.5m²).
2. The *fire area* has an *occupant load* of 300 or more.
3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.
4. The *fire area* contains a multiple-theater complex.

- (28) Section 903.2.1.3 Group A-3 is hereby amended to read as follows:

903.2.1.3 Group A-3. An *automatic sprinkler system* shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The *fire area* exceeds 5,000 square feet (464.5m²).
2. The *fire area* has an occupant load of 300 or more.
3. The *fire area* is located on a floor other than a level of exit discharge serving such occupancies.

(29) Section 903.2.1.4 Group A-4 is hereby amended to read as follows:

903.2.1.4 Group A-4. An automatic sprinkler system shall be provided throughout stories containing Group A-4 occupancies and throughout all stories from the Group A-4 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The *fire area* exceeds 5,000 square feet (464.5m²).
2. The *fire area* has an occupant load of 300 or more.
3. The *fire area* is located on a floor other than a level of exit discharge serving such occupancies.

(30) Section 903.2.1.8 Group B is hereby added to read as follows:

903.2.1.8 Group B. An automatic sprinkler system shall be provided for fire areas containing Group B occupancies where the fire area exceeds 5000 square feet (464.5 m²).

(31) Section 903.2.3 Group E is hereby amended to read as follows:

903.2.3 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E *fire areas* greater than 5,000 square feet (464.5m²) in area.
2. The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies.

Exception: In buildings where every classroom has not fewer than one exterior exit door at ground level, an automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area.

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

(32) Section 903.2.4 Group F-1 is hereby amended to read as follows:

903.2.4 Groups F-1 and F-2. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 or F-2 occupancy where one of the following conditions exists:

1. A Group F-1 or F-2 *fire area* exceeds 5,000 square feet (464.5m²).
2. A Group F-1 or F-2 *fire area* is located more than three stories above *grade plane*.
3. The combined area of all Group F-1 or F-2 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).

(33) Section 903.2.6 Group I is hereby amended to read as follows:

903.2.6 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

Exceptions:

1. An *automatic sprinkler system* is not required where group I-4 day care facilities are at the *level of exit discharge* and where every room where care is provided has not fewer than one exterior exit door and the fire area does not exceed 5,000 square feet (464.5 m²).
2. In buildings where Group I-4 day care 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 on the entire floor where care is provided, all floors between the level of care and the *level of exit discharge*, and all floors below the *level of exit discharge* other than areas classified as an open parking garage.

(34) Section 903.2.7 Group M is hereby amended to read as follows:

903.2.7 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 5,000 square feet (464.5m²).
2. A Group M *fire area* is located more than three stories above *grade plane*.
3. The combined area of all Group M *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).

(35) Section 903.2.9 Group S-1 is hereby amended to read as follows:

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

1. A Group S-1 *fire area* exceeds 5,000 square feet (464.5m²).
2. A Group S-1 *fire area* is located more than three stories above *grade plane*.
3. The combined area of all Group S-1 *fire areas* on all floors including any mezzanines, exceeds 5000 square feet (464.5m²)
4. A Group S-1 *fire area* used for the storage of commercial motor vehicle where the *fire area* exceeds 5000 square feet (464.5 m²).

(36) Section 903.2.9.1 Repair garages is hereby amended to read as follows:

903.2.9.1 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 5,000 square feet (464.5m²).
2. Buildings not more than one *story above grade plane*, with a *fire area* containing a repair garage exceeding 5,000 square feet (464.5m²).
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 5000 square feet (464 m²).

(37) Section 903.2.10 Group S-2 parking garages is hereby amended to read as follows:

903.2.10 Group S-2 An *automatic sprinkler system* shall be provided throughout all buildings containing a Group S-2 occupancy where one of the following conditions exists:

1. A Group S-2 *fire area* exceeds 5,000 square feet (464.5 m²).
2. Where an enclosed parking garage, in accordance with Section 406.6 of the *International Building Code*, is located beneath other groups.

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

3. Where the *fire area* of an open parking garage, in accordance with Section 406.5 of the *International Building Code*, exceeds 48,000 square feet (4460 m²).

4. A Group S-2 *fire area* is located more than three stories above *grade plane*.

(38) Section 903.2.11.1.3 Basements is hereby amended to read as follows:

903.2.11.1.3 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, the *basement* shall be equipped throughout with an *approved automatic sprinkler system*.

(39) Section 903.3.1.2.3 Attics is hereby amended to add item 5 to read as follows:

5. In buildings of other than R-3 occupancy containing dwelling or sleeping units.

5.1 Exceptions:

5.1.1 Buildings that do not contain more than 6 individual dwelling units or sleeping units and the units are separated from each other with a 1-hour fire barrier.

5.1.2 Buildings that do not contain more than 12 individual dwelling units or sleeping units and is divided into no more than 6 individual dwellings units (complying with number 1 above) by a minimum 2-hour fire wall.

(40) Section 903.3.1.4 Core and Shell buildings is hereby added to read as follows:

Section 903.3.1.4 Core and Shell buildings. Automatic fire sprinkler systems in buildings constructed to house future tenant spaces that are not assigned an occupancy shall have minimum hazard classification of Ordinary Hazard 2 in accordance with NFPA 13.

(41) Section 907.2.11 Single-and multiple-station smoke alarms is hereby amended by adding a second paragraph thereto to read as follows:

907.2.11 Single- and multiple-stations smoke alarms. Listed single and multiple station smoke alarms complying with UL 217 shall be installed in accordance with sections 907.2.11.1

through 907.2.11.7 and NFPA 72. Where one or more sleeping rooms are added or created in existing Group R Occupancies, the entire building shall be provided with smoke detectors located and installed as required for new Group R Occupancies described herein.

(42) Section 907.8.6 Excessive false alarms is hereby added to read as follows:

907.8.6 Excessive false alarms. An excessive number of false alarms shall be defined as two (2) alarm activations for a fire alarm system within a 60 (sixty) 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.

(43) A new Section 918 Emergency Responder Communication Coverage is hereby added to read as follows:

SECTION 918 Emergency responder communication coverage

918.1 General. In-building two-way emergency responder communication coverage shall be provided in all new buildings in accordance with Section 510.

(44) Section 1010.1.4 Floor elevation is hereby amended to add Exception 7 to read as follows:

1010.1.4 Floor elevation. There shall be a floor or landing on each side of a door. Such floor or landing shall be at the same elevation on each side of the door. Landings shall be level except for exterior landings, which are permitted to have a slope not to exceed 0.25 unit vertical in 12 units horizontal (2-percent slope). All exterior steps, slabs, walks, decks, and patios serving as exterior door landings or exterior stairs shall be adequately and permanently secured in place by approved methods to prevent such landings or stairs from being undermined or subject to significant displacement due to improper placement of supporting backfill or due to inadequate anchoring methods.

7. Exterior doors serving individual dwelling units, other than the main entrance door to a dwelling unit, may open at one intervening exterior step that is equally spaced between the interior floor level above and exterior landing below, provided that the step has a minimum tread depth of 12 inches, a maximum riser height of 7 ¾ inches (19.68cm), and a minimum width equal to the door width, and further provided that the door does not swing over the step.

(45) Section 1011.11 Handrails first paragraph is hereby amended to read as follows:

1011.11 Handrails. Flights of stairways of more than one riser shall have handrails on each side and shall comply with Section 1014. Where glass is used to provide the handrail, the handrail shall also comply with Section 2407.

(46) Section 1015.8 Window openings first paragraph is hereby amended to read as follows:

1015.8 Window openings. Windows in Group R-2 and R-3 buildings including dwelling units, where the top of the sill of an operable window opening is located less than 24 inches (610 mm) above the finished floor and more than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, shall comply with one of the following:

Add #1-4

(47) Section 1015.9 Below grade openings is hereby added to read as follows:

1015.9 Below grade openings. All area wells, stair wells, window wells, and light wells attached to any building that are located less than 36 inches from the nearest intended walking surface and deeper than 30 inches below the surrounding ground level shall have guards or approved covers for fall protection.

(48) Section 1031.2 Exceptions #1 and #4 are hereby amended to read as follows:

Exceptions:

1. *Basements* with a ceiling height of less than 72 inches (1828.8 mm) and do not contain habitable space, shall not be required to have *emergency escape and rescue openings*.

4. Within individual *dwelling and sleeping units* in Groups R-2 and R-3, where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2; *sleeping rooms* in basements shall not be required to have *emergency escape and rescue openings* provided that the basement has one of the following:

4.1. One means of egress and one emergency escape and rescue opening.

4.2. Two means of egress.

(49) Section 1031.3.3 Minimum height from floor is added to read as follows:

1031.3.3 Minimum height from floor. Emergency escape and rescue window openings that are located more than 72 inches (1829 mm) above the finished grade shall have a sill height of not less than 24 inches (609 mm) measured from the finished interior side floor.

(50) Section 1205.3 Other than Group R-3 Buildings is hereby amended to read as follows:

1205.3 Other than Group R-3 Buildings Access to systems for buildings, other than those containing Group R-3 occupancies, shall be provide in accordance with Sections 1205.3.1 through 1205.3.3.

Exception: Where it is determined by the *fire code official* that the roof configuration is similar to that of a Group R-3 occupancy, and the building does not exceed 3 stories and does not

require aerial fire apparatus access in accordance with Appendix D, the residential access and ventilation requirements in Section 1205.2.1.1 through 1205.2.1.3 are a suitable alternative.

(51) Section 3312.1 Stairways required is hereby amended to read as follows:

[BE] 3312.1 Stairways required. Where building construction exceeds 20 feet (6096 mm) or one-story in height above the lowest level of fire department vehicle access, a temporary or permanent stairway shall be provided to all floors that are provided with secured decking or flooring. As construction progresses, such stairway shall be extended to within one floor of the highest point of construction having secured decking or flooring.

(52) Section 5001.1 Scope Exception # 10 is hereby amended to read as follows:

10. The production, processing and storage of beer, distilled spirits and wines in *barrels* and *casks* when the facility is in conformance with the DISCUS "Recommended Fire Protection Practices for Distilled Spirits Beverage Facilities" and NFPA 13.

(53) Section 5601.1.3 is hereby amended by deleting Exceptions 2 and 4 and renumbering the remaining exceptions 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. The use of fireworks for display as allowed in Section 5608.

(54) Section 5701.2 Nonapplicability Item # 10 is hereby amended to read as follows:

10. The production, processing and storage of beer, distilled spirits and wines in *barrels* and *casks* when the facility is in conformance with the DISCUS "Recommended Fire Protection Practices for Distilled Spirits Beverage Facilities" and NFPA 13.

(55) Section 6109.13 Protection of Containers the exception is hereby deleted to read as follows:

6109.13 Protection of containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by Section 6107.4.

(56) Chapter 80 Referenced Standards is hereby amended by adding the following additional referenced standard:

DISCUS

Distilled Spirits Council of the United States
1250 Eye Street, NW Suite 400
Washington, DC 20005

Standard Reference	Title	Code Reference
4 th Edition, February 2020	Recommended Fire Protection Practices For Distilled Spirits Beverage Facilities	5001.1, 5701.2

LCUASS

Larimer County Engineering
200 W Oak Street
Fort Collins, CO 80524

Standard Reference	Title	Code Reference
Enacted August 1, 2021	Larimer County Urban Area Street Standards	D105.6

(57) **APPENDIX ADOPTION STATUS**

APPENDIX	TITLE	STATUS
A	Board of Appeals	Deleted
B	Fire-flow Requirements for Buildings	Adopted as Amended
C	Fire Hydrant Locations and Distribution	Adopted as Amended
D	Fire Apparatus Access Roads	Adopted as Amended
E	Hazard Categories	Adopted as Reference
F	Hazard Ranking	Adopted
G	Cryogenic Fluids—Weights and Volume Equivalents	Adopted as Reference
H	Hazardous Materials Management Plan (HMMP)	Adopted as Reference
I	Fire Protection Systems—Non-compliant Conditions	Deleted
J	Building Information Sign	Deleted
K	Construction Requirements for Existing Ambulatory Care Facilities	Deleted
L	Requirements for Fire Fighter Air Replenishment Systems	Adopted
M	High-rise Buildings—Retroactive Automatic Sprinkler Requirements	Deleted
N	Indoor Trade Shows and Exhibitions	Adopted

- (58) Section B105.1 One- and two-family dwellings, Group R-3 and R-4 buildings and townhouses is hereby amended to read as follows:

B105.1 One- and two-family dwellings, Group R-3 and R-4 buildings and townhouses. The minimum fire-flow and flow duration for one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses shall be 1000 gpm with residual pressure of 20 psi for a duration of 1 hour.

Exception: One- and two-family dwellings, Group R-3 and R-4 buildings and townhouses located outside of the City of Fort Collins and Town of Timnath Growth Management Areas shall provide a minimum fire-flow of 500 gpm with residual pressure of 20 psi for a duration of 1 hour.

- (59) Table B105.1(1) is hereby deleted.

- (60) Table B105.1(2) is hereby retained in its entirety.

- (61) Section B105.2 Buildings other than one- and two-family dwellings is hereby amended to read as follows:

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 B105.1(2).

Exception: A reduction in required fire flow of up to 75%, as *approved*, is allowed when the building is protected with an automatic fire suppression system in accordance with section 903.3.1.1 or 903.3.1.2. The resulting fire flow shall not be less than 1,500 gpm for the prescribed duration as specified in Table B105.1(2).

- (62) Table B105.2 is hereby deleted.

- (63) Appendix C is hereby amended to read as follows:

APPENDIX C FIRE HYDRANT LOCATIONS AND DISTRIBUTION

SECTION C101 GENERAL

C101.1 Scope. In addition to the requirements of Section 507.5.1, fire hydrants shall be provided along public roads and required fire apparatus access roads in accordance with this appendix for the protection of buildings, or portions of buildings, hereafter constructed or moved into the jurisdiction.

SECTION C102 NUMBER OF FIRE HYDRANTS

C102.1 Fire hydrants available. The number of fire hydrants available to a building, complex or subdivision shall not be less than that determined by spacing requirements listed in Table C102.1 when applied to fire apparatus access roads and adjacent public streets from which fire operations could be conducted.

TABLE C102.1

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)^e
Commercial/Multifamily	Value as calculated in accordance with section B105.2	600	300 ^d
One & Two Family Dwelling - Urban	1,000	800	400
One & Two-Family Dwelling - Rural	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.
- e. For the purposes of determining distance from a building to a hydrant, hydrants located across 2- and 4-lane arterial roads shall not be considered available unless the building is protected with an *approved* automatic fire suppression system. Hydrants located across 6 lane arterial roads shall not be considered available.

SECTION C103 FIRE HYDRANT SPACING

C105.1 Hydrant spacing. The average spacing between fire hydrants shall not exceed that listed in Table C102.1. 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 C102.1.

Exception: The *fire code official* 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.

SECTION C103 CONSIDERATION OF EXISTING FIRE HYDRANTS

C103.1 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.

(64) Appendix D is amended to read as follows:

APPENDIX D FIRE APPARATUS ACCESS ROADS

SECTION D101 GENERAL

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of this 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*.

D102.2.3 Installation timing. All required access roads must be installed and serviceable before aboveground construction begins unless otherwise *approved* by the *fire code official*.

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.)

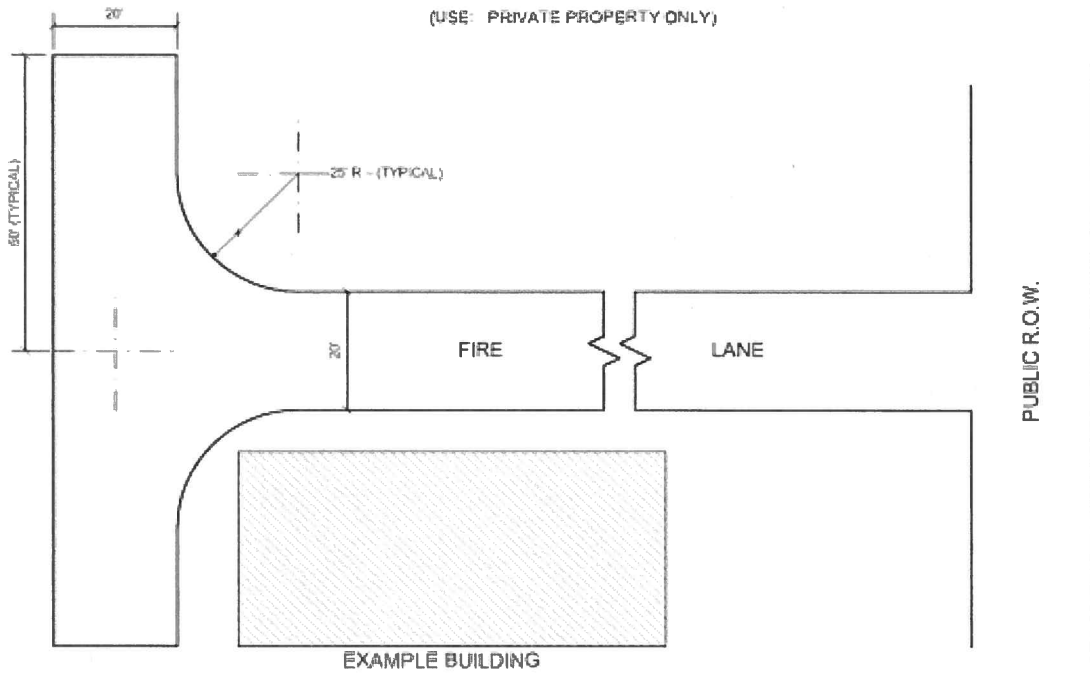
D103.3 Turning radius. The minimum turning radius shall be 25 feet inside radius and 50 feet outside radius.

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 D103.1

100' HAMMERHEAD EMERGENCY ACCESS EASEMENT

(USE: PRIVATE PROPERTY ONLY)



100' DIAMETER CUL-DE-SAC

FOR USE ON PUBLIC OR PRIVATE PROPERTY

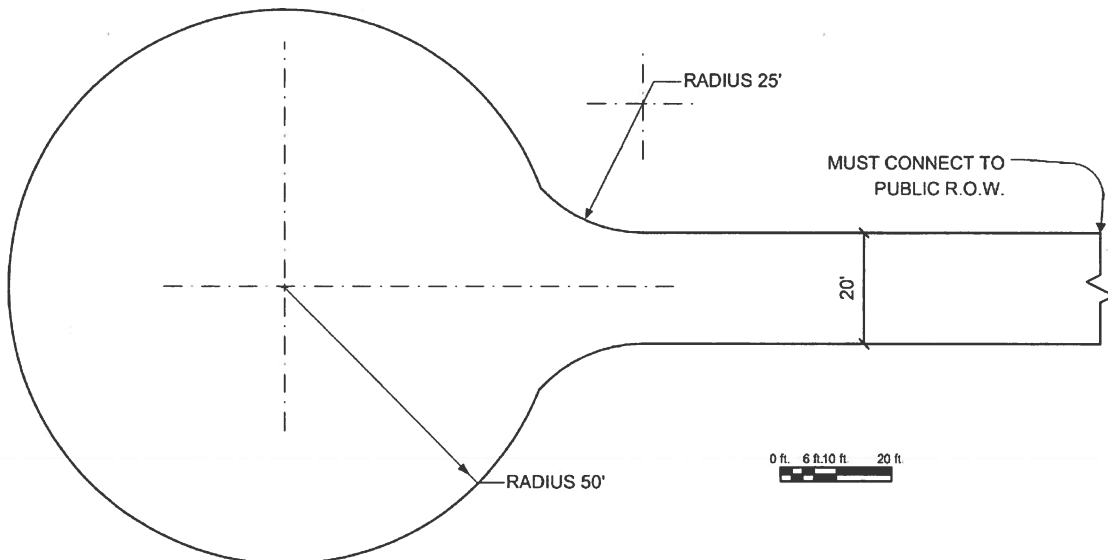
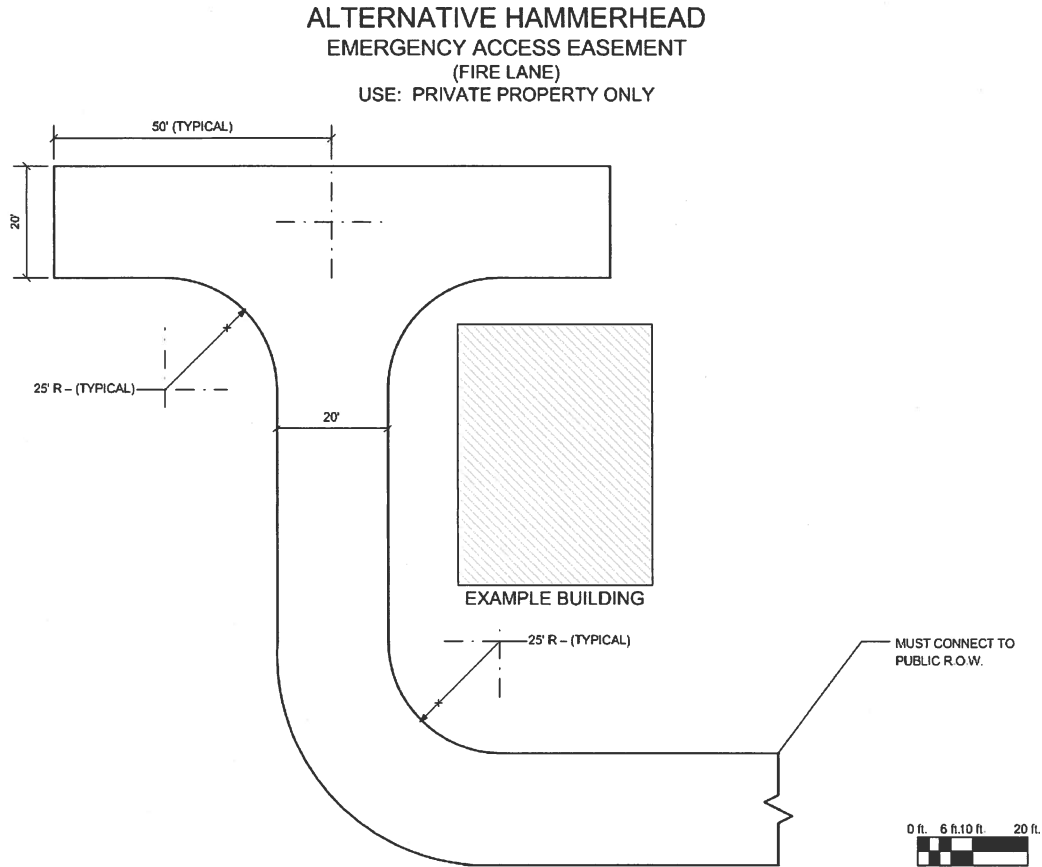


Figure D103.1 (cont'd)



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 D103.5.

TABLE 103.5
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 Additional Points of Access Required. Additional points of access shall be required where a required access roadway exceeds 660 feet (201 m) in length.

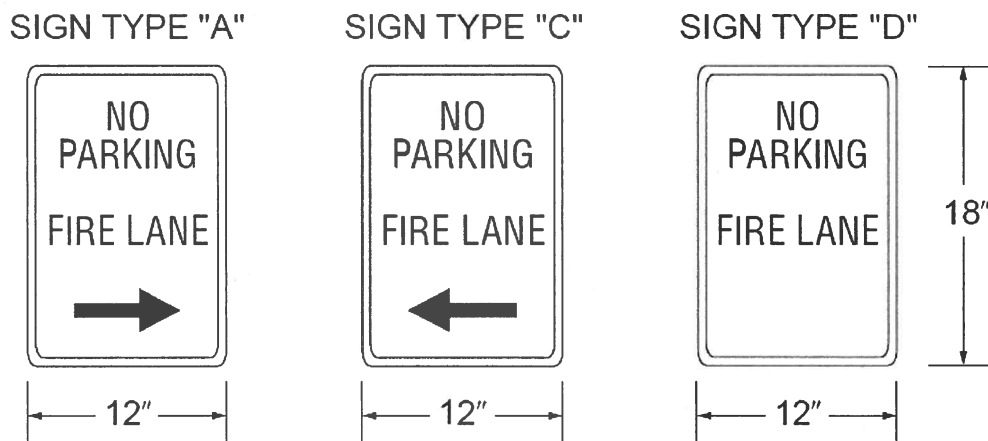
Exception: Where the access road does not exceed 1320 feet (402m) in length and all dwelling units beyond 660 feet (201 m) are equipped throughout with an *approved* automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.3, access from two directions shall not be required.

D103.5.2 Remoteness. 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).
2. 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.
5. 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*.
7. 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.
8. 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.
10. 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).

D103.7.3 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 D104 COMMERCIAL AND INDUSTRIAL DEVELOPMENTS

D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities exceeding 30 feet (9144 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 (9144 mm) or three stories in height that have a single *approved* fire apparatus access road where 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 (5760 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 (11520m²) that have a single *approved* fire apparatus access road where 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 (7925 mm), exclusive of shoulders, in the immediate vicinity of the building or portion thereof.

D105.3 Proximity to building. One or more of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 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*.

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.

D105.6 Road type. Aerial fire apparatus access roads shall not be located on an arterial street with 6 or more through lanes as defined by the LCUASS Standards for arterials.

SECTION D106 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 or 903.3.1.2.

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.

D106.3 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 D107 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 D103.5.2.

Exception: Where there are more than 30 dwelling units on a single public or private fire apparatus access road not exceeding 1320 feet (402 m) in length 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.

D107.2 Future connection. 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*.

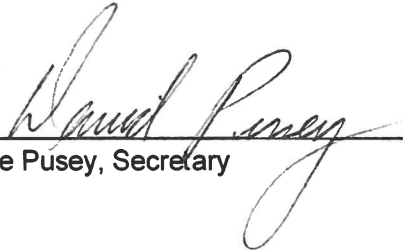
D107.3 Remoteness. Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

SECTION D108 REFERENCED STANDARDS

ASTM F 2200—14 Standard Specification for Automated Vehicular Gate Construction - D103.5
UL 325—02 Door, Drapery, Gate, Louver, and Window Operators and Systems, with Revisions through May 2015 - D103.5

NOW, THEREFORE, BE IT RESOLVED by the Poudre Valley Fire Protection District (PVFPD) that the 2021 International Fire Code Adopted by the PVFPD Board on February 23, 2022 is hereby amended by and through adoption of Resolution 2202-02.

Approved by the Poudre Valley Fire Protection Board of Directors this 23rd day of February, 2022.



Dave Pusey, Secretary

DocuSigned by:
James Gentry
C4871C0554704BD

James Gentry, Chair