

Local Amendments 2009

International Fire Code

for

Security Fire Protection District

**SECURITY
COLORADO**

TABLE OF CONTENTS

CHAPTER 1 – ADMINISTRATION

CHAPTER 3 - GENERAL PRECAUTIONS AGAINST FIRE

CHAPTER 5 - FIRE SERVICE FEATURES

CHAPTER 9 – FIRE PROTECTION SYSTEMS

CHAPTER 10 – MEANS OF EGRESS

CHAPTER 14 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

CHAPTER 22 – MOTOR FUEL DISPENSING AND REPAIR GARAGES

CHAPTER 23 - HIGH-PILE COMBUSTIBLE STORAGE

CHAPTER 24 – TENT AND MEMBRANE STRUCTURES

CHAPTER 27 – HAZARDOUS MATERIALS – GENERAL PROVISIONS

CHAPTER 30 – COMPRESSED GAS

CHAPTER 35 – FLAMMABLE GASES AND FLAMMABLE CRYOGENIC FLUIDS

CHAPTER 46 – CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS

APPENDIX B – FIRE FLOW REQUIREMENTS FOR BUILDINGS

APPENDIX C – FIRE HYDRANT LOCATIONS AND DISTRIBUTION

APPENDIX D – FIRE APPARATUS ACCESS ROADS

APPENDIX E – HAZARD CATEGORIES

APPENDIX F – HAZARD RANKING

APPENDIX G – CRYOGENIC FLUIDS – WEIGHT AND VOLUME EQUIVALENTS

APPENDIX H – HMMP AND HMIS

ADMINISTRATION (CHAPTER 1)

SECTION 101 - GENERAL

Section 101.1 Title. Amend Section 101.1 by adding the following: These regulations shall be known as the *Fire Code* of the Falcon Fire Protection District, the Black Forest Fire Rescue Protection District, the Wescott Fire Protection District, the Cimarron Hills Fire Protection District, the Security Fire Protection District, the Peyton Fire Protection District, the Hanover Fire Protection District hereinafter referred to as “this code.”

Section 101.2.1 Appendices. Delete Section 101.2.1 and replace with the following: “101.2.1 Appendices. In conjunction with the adoption of the 2009 International Fire Code, the above mentioned Fire Authorities Having Jurisdiction also adopts Appendixes B, C, D, E, F, G, and H as amended, as part of the provisions and requirements of this code.”

SECTION 102 - Applicability

Section 102.5 Application to Residential Code. Where structures are designed and constructed in accordance with the International Residential Code, the provisions of this code shall apply as follows:

1. Construction and design provisions: Provisions of this code pertaining to the exterior of the structure shall apply including, but not limited to, premises identification, fire apparatus access and water supplies. Where interior or exterior systems or devices are installed, construction permits required by Section 105.7 of this code shall also apply.
2. Administrative, operational and maintenance provision: All such provisions of this code shall apply.
3. Notwithstanding the foregoing, this code shall not apply to the following residential structures:
 - a. Detached one- and two-family dwellings or townhomes that are constructed on an unplatted parcel (legal lot), on a lot platted as part of a subdivision containing four or fewer such platted lots, or on a lot platted as part of a subdivision recorded before December 10, 2013;
 - b. Factory built units recorded before December 10, 2013;
 - c. Those constructed to federal standards; and
 - d. Accessory use structures.

Section 102.7. Referenced Codes and Standards. Amend Section 102.7 to read as follows: “102.7. Referenced Codes and Standards. The codes and standards referenced in this code shall be those that are listed in Chapter 47 and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply.” The current edition shall become effective on January 1 of the year following the NFPA’s effective date for the standard.

SECTION 105 – PERMITS

Section 105.1.4 Permit Fees. Add a new Section 105.1.4. to read as follows: “105.1.4 Permit Fees. A permit fee shall be paid to the Authority Having Jurisdiction at a rate established and adjusted by the Jurisdiction’s Board of Directors. This fee recovers costs associated with inspection related activities.”

Section 105.6 Required Operational Permits (OP). Delete Section 105.6 including all subsections in its entirety with the exception of 105.6.2 (**Amusement Buildings**), 105.6.4 (**Carnivals and Fairs**), 105.6.8 (**Compressed Gases**), 105.6.10 (**Cryogenic Fluids**), 105.6.13 (**Exhibits and Trade Shows**), 105.6.14 (**Explosives**), 105.6.16 (**Flammable and Combustible Liquids**), 105.6.20 (**Hazardous Materials**), 105.6.22 (**High-Piled Storage**), 105.6.27 (**Liquid Petroleum Gases**), 105.6.30 (**Open Burning**), 106.6.43 (**Temporary Membrane Structures and Tents**).

Section 105.6.16 Flammable and Combustible Liquids. Amend Section 105.6.16. Flammable and Combustible Liquids, Item 2, to read as follows: “2. To store, handle or use Class I liquids in excess of 25 gallons in a building or in excess of 60 gallons outside of a building, except that a permit is not required for the following:

- 2.1 The storage or use of Class I liquids in the fuel tank or a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the code official, would cause an unsafe condition.

2.2 The storage or use of paints, oils, varnishes or similar flammable mixtures when such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days.”

Section 105.6.20 Hazardous Material Quantities Requiring Permit. The following table establishes the threshold amounts of hazardous materials that require permitting from the Authority Having Jurisdiction.”

**TABLE 105.6.20
PERMIT AMOUNTS FOR HAZARDOUS MATERIALS**

TYPE OF MATERIAL	AMOUNT
Combustible liquids	See Section 105.6.16
Corrosive materials	See Section 105.6.8
Gases	55 gallons
Liquids	1000 pounds
Solids	
<i>Electrolytes</i>	<i>50 gallons</i>
Explosive materials	See Section 105.6.14
Flammable materials	See
Gases	Section
Liquids	105.6.8
Solids	See
	Section
Highly toxic materials	See Section 105.6.8
Gases	Any Amount
Liquids	Any Amount
Oxidizing materials	See Section 105.6.8
Gases	
Liquids	
Class 4	Any Amount
Class 3	1 gallon
Class 2	10 gallons
Class 1	55 gallons
Solids	
Class 4 Class 3 Class 2 Class 1	Any Amount 10 pounds b 100 pounds 500 pounds
Organic peroxides	
Liquids	
Class I	Any Amount
Class II	Any Amount
Class III	Any Amount
Class IV	1 gallon
Class V	2 gallons
Solids	No Permit Required
Class I	
Class II	Any amount
Class III	Any Amount
Class IV	10 pounds
Class V	20 pounds
	No Permit Required
Pyrophoric materials	
Gases	Any Amount
Liquids	Any Amount
Solids	Any Amount
Toxic materials	See Section 105.6.8
Gases	10 gallons
Liquids	100 pounds
Solids	
Unstable (reactive) materials	Any Amount
Liquids	Any Amount
Class 4	5 gallons
Class 3	10 gallons
Class 2	Any Amount
Class 1	Any Amount
Solids	50 pounds
Class 4	100 pounds
Class 3	
Class 2	
Class	
Water-reactive materials	Any Amount
Liquids	5 gallons
Class 3	55 gallons
Class 2	Any Amount
Class 1	50 pounds
Solids	500 pounds
Class 3	
Class 2	
Class 1	
<i>Other Health Hazards</i>	<i>55 gallons</i>
<i>Liquids</i>	<i>500 pounds</i>
<i>Solids</i>	<i>650 cubic feet</i>
<i>Gases</i>	

Section 105.6.27 Liquid Petroleum Gases (LPG). Amend Section 105.6.27 Liquid Petroleum Gases (LPG) to read as follows: “A permit is required to install a temporary LPG storage tank(s) 2000-gallons or greater”.

Section 105.6.43 Temporary Membrane Structures and Tents. Amend Section 105.6.43 Temporary Membrane Structures and Tents to read as follows: “A permit is required to erect or operate an air-supported temporary membrane structure, canopy or a tent having an area of 2,400 square feet or greater.”

Section 105.7 Construction Permits (CP). Delete Section 105.7 in its entirety and replace with the following. Section 105.7 Construction Permits. A plan review, approval, and/or permit shall be obtained from the Authority Having Jurisdiction for the following activities:

CP1 Automatic Fire-Extinguishing Systems. A construction permit is required for the installation of or modification to, an automatic fire-extinguishing system. Routine maintenance performed in accordance with this code is not considered a modification and does not require a permit.

CP2 Commercial Construction: The Authority Having Jurisdiction shall review and approve all commercial construction plans for projects located within the fire response area prior to the Regional Building Department issuing a commercial building permit.

CP3 Development. The Authority Having Jurisdiction shall review and have the option to make recommendations to all development plans for proposed developments located within the fire response area.

CP4 Fire Alarm and/or Detection Systems and Related Equipment. A construction permit is required for installation of or modification to a fire alarm and/or detection systems and related equipment. Routine maintenance performed in accordance with this code is not considered a modification and does not require a permit.

CP5 Fire Pumps and Related Equipment. A construction permit is required for installation of, or modification to, fire pumps and related fuel tanks, jockey pumps, controllers, and generators. Routine maintenance performed in accordance with this code is not considered a modification and does not require a permit.

CP6 Fire Hydrants. The Authority Having Jurisdiction shall review and approve all fire hydrant and water main plans for projects located within the fire response area prior to the applicable water jurisdiction approving the project.

CP7 Hazardous Materials. A construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service or close or substantially modify a storage facility or other area regulated by Chapter 27 when the hazardous materials in use or storage exceed the amounts listed in Table 105.6.20.

Exceptions:

1. *Routine maintenance.*
2. *For emergency repair work performed on an emergency basis, application for permit shall be made within two working days of commencement of work.*

CP8 High-Pile Storage. A construction plan review and permit is required to use any building or portion thereof as a high-pile combustibles storage area exceeding 500 square feet (see definition in Chapter 23).

CP10 Standpipe Systems. A construction permit is required for the installation, modification, or removal from service of a standpipe system. Routine maintenance performed in accordance with this code is not considered a modification and does not require a permit.”

SECTION 106 – INSPECTIONS

Section 106.5 Inspection Fees. Add a new Section 106.5 to read: Section 106.5 Inspection Fees. An inspection fee at a rate established and adjusted by the Authority Having Jurisdiction’s Board of Directors may be assessed for each inspection, or for any re-inspection when any portion of work for which inspection is called is not complete or when required corrections have not been completed. The re-inspection fee(s) may be assessed:

- When the approved plans are not on the worksite; or
- For failing to provide access for which inspection is requested; or
- For failing to maintain all work in an exposed condition until inspected and approved for installation; or
- For deviating from plans as approved by the Fire Code Official; or
- For lack of sufficient documentation, equipment, or personnel needed to complete the inspection; or
- When the work that an inspection has been called for has not been pretested or is not ready for inspection.”

SECTION 109 - VIOLATIONS

Section 109.3 Violation Penalties. Delete Section 109.3 and replace with the following: “109.3. Violation Penalties. Penalties shall be assessed for violations of this code as authorized by C.R.S. 32-1-1002 (3) and (4), or any other applicable federal, state or local law.”

SECTION 111 – STOP WORK ORDER

Section 111.4 Failure to Comply. Delete Section 111.4 and replace with the following: “111.4. Failure to Comply. A person who violates a stop work order shall be subject to all legal or equitable remedies available to the Fire Authority, including but not limited to specific performance or injunction, and also shall be subject to the penalties authorized by C.R.S. 32-1-1002 (3) and (4), or any other applicable federal, state, or local law or ordinance

GENERAL PRECAUTIONS AGAINST FIRE (CHAPTER 3)

SECTION 304 - COMBUSTIBLE WASTE MATERIAL

Section 304.1.2 Vegetation. Amend Section 304.1.2 to read as follows: “304.1.2 Vegetation. Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirements in wildland-urban interface areas shall be in accordance with the El Paso County Land Development Code.

FIRE SERVICE FEATURES (CHAPTER 5)

SECTION 505 – PREMISES IDENTIFICATION

Section 505.1. Address Identification. Amend Section 505.1 to read as follows: “505.1. 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. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of five (5) inches (127 mm) high with a minimum stroke width of one half (0.5) 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 other means of signage shall be used to identify the structure.”

Section 505.1.1. Suite Numbers. Add a new section 505.1.1 to read as follows: “505.1.1 Suite Numbers. Any area occupied by tenants of a mall or shopping center, the main entrance to which is from the inside of the mall or shopping center, or any area used for other than single-unit or multi-unit residential occupancy that abuts a public courtyard or other public space shall be identified by numbers that are a minimum of four (4) inches in height with no less than one half (1/2) inch stroke so as to be plainly visible and legible from a distance of at least fifty (50) feet from the main entrance to the area.”

Section 505.1.2 Addressing of Rear Doors. Add a new section 505.1.2 to read as follows: “505.1.2 Addressing of Rear Doors. The rear entrance or access doors of all malls, strip center, commercial center buildings, and other areas with multi-tenant spaces shall be identified with the appropriate address number and business name. The address numbers and/or letters shall be at least four inches high with a minimum stroke width of 0.5 inch. The Fire Authority Having Jurisdiction may require the installation of address numbers/letters on other locations to prevent confusion in the event of an emergency.”

SECTION 507 – FIRE PROTECTION WATER SUPPLIES

Section 507.1. Required Water Supply. Amend Section 507.3 by adding the following: Payment into a fund shall not constitute an approved method of meeting fire protection water supply requirements.

FIRE PROTECTION SYSTEMS (CHAPTER 9)

SECTION 901 – GENERAL

Section 901.3.1 Relocations and Additions to Fire Sprinklers in Existing Facilities. Add a new Section 901.3.1 to read as follows: “901.3.1. Relocations and Additions to Fire Sprinkler Systems in Existing Facilities:

Any additions or remodeling to existing commercial sprinkler systems that involve 20 sprinkler heads or less, or 5 or less fire alarm devices will not require a permit through the Fire Authority Having Jurisdiction; however, a letter from a Pikes Peak Regional Building Department (PPRBD) licensed sprinkler contractor shall be submitted to the Fire Authority Having Jurisdiction. The letter shall be on the sprinkler contractor’s letterhead and shall include the following information:

- 1) All work performed will be completed by the PPRBD licensed sprinkler contractor indicated on the letterhead.
- 2) The hydraulic supply to the system in this area will be sufficient and that no hydraulic overloading exists.
- 3) The system will be installed in accordance with all applicable local and national standards (e.g. *International Building Code, International Fire Code, NFPA 13 and NFPA 72*).
- 4) The scope of the work being conducted including the building name and address as well as interior area location.
- 5) The number of heads being relocated and/or installed.
- 6) A time schedule of the work being performed, giving start and completion dates.
- 7) No inspections will be performed on this minor work unless a special request is made or the Fire Authority Having Jurisdiction elects to make quality control checks on the work being performed.
- 8) This does not apply to spray booths, *NFPA 13D*, and *13R* systems, special hazard systems, or other special stipulations previously mandated and required by the Fire Authority Having Jurisdiction.
- 9) All systems with more than 20 heads or more than 5 fire alarm devices must conform to all local and state standards including plan submittal, permits, and other requirements.”

Section 901.4.2 Non-required Fire Protection Systems. Amend Section 901.4.2 to read as follows: “901.4.2. Non-required Fire Protection Systems. A non-required fire protection system installed voluntarily shall be installed, repaired, operated, tested and maintained in accordance with this code and applicable standards.”

Section 901.4.5 Approved Contractors. Add a new Section 901.4.5 to read as follows: “901.4.5. Approved Contractors. All fire alarms, water-based suppression systems, portable fire extinguisher appliances, private fire hydrants and special hazard systems shall be designed, installed, repaired, inspected, tagged and maintained by an appropriately licensed contractor through the Pikes Peak Regional Building Department.

Section 901.7.7 Permanent Removal from Service. Add a new Section 901.7.7 to read as follows: “901.7.7 Permanent Removal from Service. When a fire protection system is permanently removed from service it shall be completely removed from the structure, to include all valves, panels, devices, appliances, wiring, piping, appurtenances, fire department connections, etc. The only portion of the system permitted to remain includes portions concealed in walls or hard lid area. The water riser stub coming out of the ground and associated fire line shall be abandoned in accordance with applicable water district/jurisdiction requirements.

Section 901.10. Clear Space Around Fire Protection Equipment. Add a new Section 901.10 to read as follows: “901.10. Clear Space Around Fire Protection Equipment. A three (3) foot clear space shall be

maintained in front of, to the side of and around, as applicable, fire sprinkler riser assemblies to include all control valves, hose valves, fire alarm control panels, fire alarm annunciators and power supply panels. This clear space shall include an unobstructed path of travel and access to the fire protection system appurtenances.”

SECTION 903 – AUTOMATIC SPRINKLER SYSTEMS

Section 903.3.1.1.1. Exempt locations. Section 903.3.1.1.1. Amend Section 903.3.1.1.1 to read as follows: “**903.3.1.1.1. Exempt locations.** Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with NFPA 72 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistant rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. Safe deposit or other vaults of fire resistive construction when used for the storage of records, files and other documents, when stored in metal cabinets.
4. Communication equipment areas under exclusive control of a public communication utility agency, provided all of the following are met:
 - 4-1. The equipment areas are separated from the remainder of the building by two-hour fire rated enclosure; and
 - 4-2. Such areas are used exclusively for such equipment; and
 - 4-3. An automatic smoke-detection system is installed in such areas and is supervised by an approved central, proprietary or remote station service or a local alarm which will give an audible signal at a constantly attended location; and
 - 4-4. Other approved fire-protection equipment such as portable fire extinguishers or Class I standpipes are installed in such areas.
5. Main electrical rooms where electrical services enter a building and are distributed, provided all of the following are met:
 - 5-1. The room is dedicated to electrical equipment only.
 - 5-2. Only dry-type electrical transformers are used.
 - 5-3. Electrical equipment is installed in an enclosure meeting the requirements of a two hour fire rated enclosure in accord with the International Building Code including protection for all penetrations.
 - 5-4. No combustible storage is permitted to be stored in the room.
 - 5-5. An automatic smoke detection system is installed in such areas and is supervised by an approved central proprietary or remote station service in accord with Section 907 of this code.
 - 5-6. A portable fire extinguisher rated not less than 2-A:20-BC is provided at the door giving access into the room.
6. Elevator machine rooms, provided all of the following are met:
 - 6-1. The elevator equipment is to be installed to meet the more restrictive of the two options noted below:

Within an enclosure meeting the fire resistive rating of the elevator hoist way, or fire barrier, in accord with the International Building Code.
 - 6-2. No combustible storage is permitted to be stored in the room.
 - 6-3. An automatic smoke-detection system is installed in such areas and is supervised by an approved central, proprietary or remote station service in accord with Section 907 of this code.
 - 6-4. A portable fire extinguisher rated not less than 2-A:20-BC is provided at the door giving access into the room.

Section 903.3.5.1.2 Residential Combination Services. Amend Section 903.5.1.2 to read as follows: “903.3.5.1.2. Residential Combination Services. A single combination water supply shall be allowed only on NFPA 13D systems.”

Section 903.4. Amend Section 903.4 by deleting exception # 3.

Section 903.4.2.1 Water-flow Alarm Systems. Add a new Section 903.4.2.1 to read as follows: “903.4.2.1. Water-flow Alarm Systems. Water-flow alarm systems shall be provided with a minimum of one interior, and one exterior audible and visual water-flow alarm appliance.

In multi-tenant commercial structures, each tenant space shall be equipped with an audible and visual water-flow appliance.

SECTION 904 – ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING SYSTEMS

Section 904.11.2. System Interconnection. Amend Section 904.11.2 to read as follows: “904.11.2. System Interconnection. The actuation of the fire extinguishing system shall automatically shut down the fuel and/or electrical power supply to the cooking equipment and any electrical receptacles which are capable of supplying an ignition source under the hood. Any receptacles that could be used to power appliances located under the hood shall also be shut down. The fuel and electrical supply reset shall be manual.”

Section 904.11.6.4. Ventilation System Interconnection. Add a new Section 904.11.6.4 to read as follows: “904.11.6.4. Ventilation System Interconnection. Upon activation of the fire suppression systems, the exhaust for the hood shall remain on.

SECTION 905 – STANDPIPE SYSTEMS

Section 905.3.1 Building Height. Delete all exceptions and Amend Section 905.3.1 to read as follows: “905.3.1. Building Height. Class I automatic wet standpipe system shall be installed throughout buildings where the floor level of the highest story is located more than 30 feet above the lowest level of the Fire Department vehicle access, or where the floor level of the lowest story is located more than 30 feet below the highest level of Fire Department vehicle access.

Exception: Manual dry standpipes are allowed in open parking garages that are subject to freezing temperatures, provided that the hose connections are located so that all portions of the building are within 30 feet of a nozzle attached to 100 feet of hose.”

Section 905.3.4 Stages. Amend Section 905.3.4 and delete the exception to read as follows: “905.3.4. Stages. Stages greater than 1,000 square feet in area shall be equipped with a Class I wet standpipe system with 2½ inch hose connections on each side of the stage.”

Section 905.3.4.1 Hose and Cabinet. Delete Section 905.3.4.1 in its entirety.

Section 905.4 Location of Class I Standpipe Hose Connections. Amend Section 905.4 Location of Class I standpipe hose connections, by adding an exception to subsection number 1, to read as follows:

1. In every required stairway, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at an intermediate floor level landing between floors, unless otherwise approved by the fire code official.

Exception: When stairways are constructed with a vestibule in accordance with the International Building Code, the hose connection shall be installed inside the floor level vestibule, not in the stairway.

SECTION 907 – FIRE ALARM AND DETECTION SYSTEMS

Section 907.2.6.2.1 Group I-2 Alternative Designs. Add a new Section 907.2.6.2.1 to read as follows: “907.2.6.2.1 Alternative Design. As an alternative design, addressable system smoke detectors may be used in patient rooms. In such case, a visual notification in the corridor shall not be required and the patient room detector shall initiate building alarm. A remote annunciator shall be located at the respective nurses’ station.”

Section 907.2.8.3 Group R-1 Smoke Alarms. Amend Section 907.2.8.3 to read as follows: “907.2.8.3. Smoke Alarms. Single- and multiple-station smoke alarms shall be installed in accordance with Section 907.2.11. Smoke alarms provided in guest rooms may be annunciated at the fire alarm control panel as supervisory only.”

Section 907.2.9.2 Group R-2 Smoke Alarms. Amend Section 907.2.9.2 to read as follows: “907.2.9.2. Smoke Alarms. Single and multiple station smoke alarms shall be installed in accordance with Section 907.2.11. Smoke alarms provided in guest rooms may be annunciated at the fire alarm control panel as supervisory only.”

SECTION 910 – SMOKE AND HEAT VENTS

Section 910.1 General. Amend Section 910.1 by deleting exception number 2.

Section 910.3.2.2 Sprinklered Buildings. Amend Section 910.3.2.2 to read as follows: “910.3.2.2. Sprinklered Buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically by activation of a heat-responsive device rated at least 100 degrees above the operating temperature of the fire sprinkler heads in the immediate vicinity of the vent. Vents shall also be manually operable from the exterior by an approved means.”

SECTION 912 – FIRE DEPARTMENT CONNECTIONS

Section 912.1.1. Dead-End Water Mains. Add a new Section 912.1.1 to read as follows: “912.1.1 Fire Department Connections (FDC’s). *Unless hydraulically proven to meet or exceed the combined demanded and approved by the Fire Code Official,* dead end mains shall not be used when all of the following are located on a single tap main:

- 1) Automatic fire sprinkler systems.
- 2) Fire hydrants supporting the Fire Department Connection.
- 3) Fire hydrants required for external fire protection.”

Section 912.1.2. Inlets. Add a new Section 912.1.2 to read as follows: “912.1.2. Inlets. There shall be a minimum of one 2 ½” connection for every 250 gallons per minute (gpm) of system demand.

Exception: As allowed by NFPA 13R.”

Section 912.1.3 Multiple Fire Department Connections. Add a new Section 912.1.3 to read as follows: “912.1.3. Multiple Fire Department Connections (FDC’s). When demand of sprinkler system exceeds 1500 gpm’s, additional FDC’s shall be provided and located as specified by the fire code official. Multiple FDC’s shall be of equal capacity.”

Section 912.2 Location. Amend Section 912.2 to read as follows: “912.2. Location. With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. Fire Department connections shall be located within 40 feet (12.2m) of an approved fire apparatus access road or fire lane, and within 100 feet (30.5m) of a fire hydrant capable of supplying the fire protection system demand. The location of the fire department connections shall be approved by the fire code official.”

Section 912.2.1. Visible Location Amend Section 912.2.1 to read as follows: “912.2.1. Visible Location. Fire department connections shall be located on the front entrance and/or street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise approved by the fire code official.”

Section 912.2.1.1 Indicating Device. Add a new Section 912.2.1.1 to read as follows: “912.2.1.1 Indicating Device. A listed horn/strobe, activated by the sprinkler water-flow switch, shall be located within 20 feet of the fire department connection, and shall be highly visible to emergency responders along their normally anticipated arrival route.”

MEANS OF EGRESS (CHAPTER 10)

SECTION 1029 – EMERGENCY ESCAPE AND RESCUE

Section 1029.6 Emergency Escape Openings Below Horizontal Projections. Add a new Section 1029.6 to read as follows: “1029.6. Emergency Escape Openings Below Horizontal Projections. Emergency escape openings may be located below decks, porches, cantilevers and similar horizontal projections provided one of the following:

1. The location of the projection allows the emergency escape opening to be fully opened and provides a path not less than 36 inches in height and width to a yard or court.
2. The minimum horizontal area of 9 square feet is provided clear of the projection and the horizontal projection of the operable portion of the egress window and ladder, if required, remain clear of the projection.”

FIRE SAFETY DURING CONSTRUCTION & DEMOLITION (CHAPTER 14)

SECTION 1402 - DEFINITIONS

Section 1402.1 Temporary Fire Access Road. Add a new Definition 1402.2 to read as follows: “1402.2 Temporary Fire Access Road. Temporary access roads shall be an all weather surface comprised of either the first lift of asphalt or concrete/compacted gravel to a thickness capable of supporting the imposed loads of fire department apparatus. A 20 foot minimum width shall be maintained unless the permanent road is designed less than 20 feet, in which case the temporary road shall be the intended width of the permanent road. Adequate street signs and fire lane signs shall be installed where applicable. Temporary access roads must be maintained in accordance with this section. Temporary roads serving as fire lanes shall not be in place more than 6 months without special approval from the fire department.”

MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES (CHAPTER 22)

SECTION 2203 – LOCATION OF DISPENSING DEVICES

Section 2203.2 Emergency Disconnect Switches. Delete Section 2203.2 and replace with the following: “2203.2. Emergency Disconnect Switches. Approved, clearly identified, and readily accessible emergency disconnect switches shall be provided at approved locations to stop the transfer of fuel to the fuel dispensers in the event of a fuel spill or other emergency. Two emergency disconnect switches for exterior fuel dispensers shall be required as follows:

1. Exterior: Shall be located within 100 feet of, but not less than 20 feet from the fuel dispensers. Provide a mushroom style switch that is readily accessible and must cut off power to all dispensers and pumps.
2. Interior: Shall be located at the Attendant duty location. Provide a palm-type switch button which will shut off the flow of fuel and cut off power to all dispensers and pumps.
3. Emergency disconnect switches shall shut-off the power in conformance with the National Electrical Code and NFPA-70 and NFPA-30A.
4. Emergency controls shall be of a type which is only manually resettable.

For interior fuel-dispensing operations, the emergency disconnect switch shall be installed at an approved location.”

Section 2203.2.1 Emergency Disconnect Switch Signage. Add a new Section 2203.2.1 to read as follows: “2203.2.1. Emergency Disconnect Switch Signage. Signs shall be provided in approved locations and of the legible size:

1. Interior: At least 1 inch in height and 1/8 inch stroke Red on White background.
2. Exterior: At least 2 inches in height and 1/4 inch stroke Red on White background.”

HIGH-PILED COMBUSTIBLE STORAGE (CHAPTER 23)

SECTION 2306 – GENERAL FIRE PROTECTION AND LIFE SAFETY FEATURES

Section 2306.6.1.3 Locking Devices. Amend Section 2306.6.1.3 to read as follows: "2306.6.1.3 Locking Devices. Only approved locking devices shall be used. All doors required by Section 2306.1 shall be keyed the same and master keys to doors shall be provided in the required on-site Knox™ box."

TENTS AND OTHER MEMBRANE STRUCTURES (CHAPTER 24)

SECTION 2403 – TEMPORARY TENTS AND MEMBRANE STRUCTURES

Section 2403.2 Approval Required. Amend Section 2403.2 to read as follows, and delete all exceptions: "2403.2. Approval Required. Individual or multiple tents, canopies and membrane structures having individual or contiguous area in excess of 2,400 square feet shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the fire code official."

HAZARDOUS MATERIALS-GENERAL PROVISIONS (CHAPTER 27)

SECTION 2704 - STORAGE

Section 2704.2.1 Spill Control for Hazardous Material Liquids. Amend Section 2704.2.1 to read as follows: "2704.2.1 Spill Control for Hazardous Material Liquids. Rooms, buildings or areas used for storage of hazardous material liquids in individual vessels having a capacity of more than 30 gallons, or in which the aggregate capacity of multiple vessels exceeds 55 gallons, shall be provided with spill control to prevent the flow of liquids to adjoining areas. Floors in indoor locations and similar surfaces in outdoor locations shall be constructed to contain a spill from the largest single vessel by one of the following methods:

1. Liquid-tight sloped or recessed floors in indoor locations or similar areas in outdoor locations.
2. Liquid-tight floors in indoor locations or similar areas in outdoor locations provided with liquid-tight raised or recessed sills or dikes.
3. Sumps and collection systems.
4. Other approved engineered systems.

Except for surfacing, the floors, sills, dikes, sumps and collection systems shall be constructed of noncombustible material, and the liquid-tight seal shall be compatible with the material stored. When liquid-tight sills or dikes are provided, they are not required at perimeter openings having an open-grate trench across the opening that connects to an approved collection system."

Section 2704.2.2 Secondary Containment for Hazardous Material and Solids. Amend Section 2704.2.2 to read as follows: "2704.2.2. Secondary Containment for Hazardous Material Liquids and Solids. Where required by Table 2704.2.2 buildings, rooms or areas used for the storage of hazardous materials liquids or solids shall be provided with secondary containment in accordance with this section when the capacity of an individual vessel or the aggregate capacity of multiple vessels exceeds the following:

1. Liquids: Capacity of an individual vessel exceeds 30 gallons or the aggregate capacity of multiple vessels exceeds 55 gallons.
2. Solids: Capacity of an individual vessel exceeds 300 pounds or the aggregate capacity of multiple vessels exceeds 550 pounds."

COMPRESSED GAS (CHAPTER 30)

SECTION 3003 – GENERAL REQUIREMENTS

Section 3003.7.12 Location. Add a new 3003.7.12 to read as follows: "3003.7.12. Location. Portable or manifolded cylinders located inside of a building shall be stored in a well-ventilated, dry location at least 20 feet from combustible material and at least 10 feet from elevators, stairways, corridors, exits or in areas normally used, or intended to be used, as a means of egress."

Section 3006.1 General. Amend Section 3006.1 to read as follows: “3006.1. General. Compressed gases at hospitals and similar facilities intended for inhalation or sedation including, but not limited to, analgesia systems for dentistry, podiatry, veterinary and similar uses shall comply with Sections 3006.2 through 3006.4 in addition to other requirements of this chapter.

Medical Gas Systems shall be installed and inspected by credentialed American Society of Sanitary Engineering (ASSE) 6010 medical gas system installers, ASSE 6015 bulk medical gas system installers, ASSE 6020 medical gas system inspectors, and ASSE 6030 medical gas verifiers.

Contractor shall be responsible for compliance with all local, state or federal codes, standards, and appropriate industry practices.”

FLAMMABLE GASES AND FLAMMABLE CRYOGENIC FLUIDS (CHAPTER 35)

SECTION 3503 – GENERAL REQUIREMENTS

Section 3503.1.7 Location. Add a new Section 3503.1.7 to read as follows: “3503.1.7. Location. Portable or manifolded cylinders located inside of a building shall be stored in a well-ventilated, dry location at least 20 feet from combustible material and at least 10 feet from elevators, stairways, corridors, exits or in areas normally used, or intended to be used, as a means of egress.”

CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS (CHAPTER 46)

SECTION 4603 – FIRE SAFETY REQUIREMENTS FOR EXISTING BUILDINGS

Section 4603.1 Required Construction. Amend Section 4603.1 to read as follows: “4603.1. Required Construction. Existing buildings shall comply as enumerated in Sections 4603.6 through 4603.7.3.

The provisions of this chapter shall not be construed to allow the elimination of fire protection systems or a reduction in the level of fire safety provided in buildings constructed in accordance with the previously adopted codes.

Exception: Group U Occupancies.”

Table 4603.1 Occupancy and Use Requirements. Delete Table 4603.1 in its entirety.

Section 4603.2 Elevator Operation. Delete Section 4603.2 in its entirety.

Section 4603.3 Vertical Openings. Delete Section 4603.3 in its entirety.

Section 4603.4 Sprinkler Systems. Delete Section 4603.4 in its entirety.

Section 4603.5 Standpipes. Delete Section 4603.5 in its entirety.

Section 4603.6.5 Group R-1. Delete Section 4603.6.5 in its entirety.

Section 4603.6.5.1 Group R-1 Hotel and Motel Manual Fire Alarm System. Delete Section 4603.6.5.1 in its entirety.

Section 4603.6.5.1.1 Group R-1 Hotel and Motel Automatic Smoke Detection System. Delete Section 4603.6.5.1.1 in its entirety.

Section 4603.6.5.2 Group R-1 Boarding and Rooming Houses Manual Fire Alarm System. Delete Section 4603.6.5.2 in its entirety.

Section 4603.6.5.2.1 Group R-1 Boarding and Rooming Houses Automatic Smoke Detection System. Delete Section 4603.6.5.2.1 in its entirety.

Section 4603.6.6 Group R-2. Delete Section 4603.6.6 in its entirety.

Section 4604.23 Egress Path Markings. Delete Section 4604.23 in its entirety.

Section 4606 Existing High-Piled Storage Facilities. Create a new section as follows: "Section 4606 Existing High-Piled Storage Facilities.

Section 4606.1 Scope. This section is applicable to all high-piled combustible storage in buildings that meet at least one of the following criteria:

1. Any existing building built prior to January 1, 1988, containing the same occupant, original occupant, and utilizing high pile storage defined by this chapter.
2. Any existing, non-conforming, building utilizing high pile storage, defined by this chapter, in which no official records such as certificate of occupancy, fire department records or similar verifying the occupancy of the current tenant.

Section 4606.2 Storage of Class I-IV and High Hazard Commodities. The storage of class I-IV and high hazard commodities shall meet the provisions of this section as set forth.

Section 4606.2.1 Automatic Sprinklers. When automatic sprinklers are required by 2306.4, an approved automatic sprinkler system in accordance with Section 903 shall be installed throughout the building or throughout all high pile combustible areas to a 2-hour fire resistance rated fire barrier wall constructed in accordance with the currently adopted Pikes Peak Regional Building Code. Openings in such walls shall be protected by opening protective assemblies meeting applicable code requirements for the hourly rating of the wall.

Exceptions:

1. *Existing automatic sprinkler systems that do not meet the requirements of Section 903 may be used if demonstrated to provide the required protection for the commodity which it protects and is identified by a PPRBD licensed FSC-A suppression contractor.*
2. *Class IV and high hazard commodities shall be protected with an approved automatic sprinkler system in accordance with Section 903.*

Section 4606.2.2 Smoke/Heat Vents/Draft Curtains. Smoke and heat vents shall be provided in accordance with Section 2306.7. When required, a vent area to floor area ratio of 1:200 shall be utilized. Draft curtains, when required, may only be used in non-sprinkled buildings and in accordance with Section 2306.7."

APPENDIX B - FIRE-FLOW REQUIREMENTS FOR BUILDINGS

SECTION B105 – FIRE-FLOW REQUIREMENTS FOR BUILDINGS

Section B105.2 Buildings Other Than One- and Two-Family Dwellings. Amend Exception in Section B105.2 to read as follows:

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* installed in accordance with Section 903.3.1.1 or 903.3.1.2. The resulting fire-flow shall not be less than 1,500 gallons per minute (5678 L/min) for the prescribed duration as specified in Table B105.1.

APPENDIX C - FIRE HYDRANT LOCATIONS AND DISTRIBUTION

SECTION C105 – DISTRIBUTION OF FIRE HYDRANTS

Section C105.2 Distance from Structures. Add a new Section 105.2 to read as follows: "C105.2. Distance From Structures. Hydrants shall be located a minimum of 40 feet from the structures they are serving, unless otherwise approved by the Fire Code Official."

APPENDIX D - FIRE APPARATUS ACCESS ROADS

SECTION D102 – REQUIRED ACCESS

Section D102.1 Access and Loading. Amend Section D102.1 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 at least 75,000 pounds with a minimum single axle weight of 27,000 pounds."

Section D103.1 Access Road Width with a Hydrant. Delete Section D103.1 in its entirety.

Figure D103.1 Dead-End Fire Apparatus Access Road Turnaround. Delete Figure D103.1 and replace with the following:

FIGURE D103.1 MINIMUM DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND.

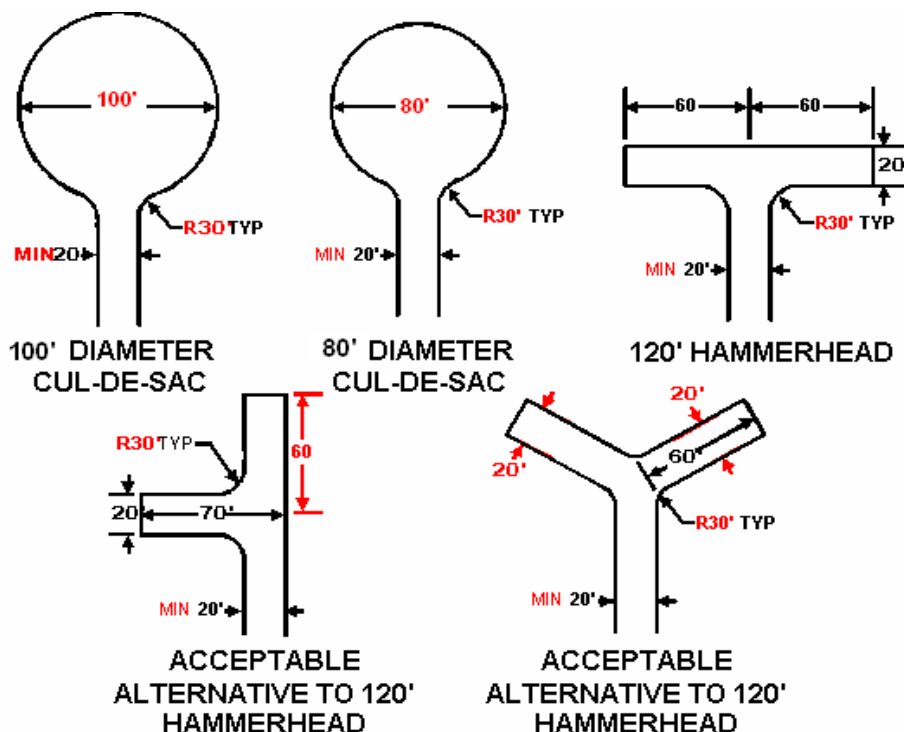


Table D103.4 Requirements for Dead-End Fire Apparatus Access Roads. Delete Table D103.4 and replace with the following:

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

DEAD-END LENGTH (FEET)	MINIMUM ROAD WIDTH (FEET)	APPROVED TURNAROUND OPTIONS (See Figure D103.1)
0 - 150	20	NONE REQUIRED
151 – 500	20	1) 120-FOOT HAMMERHEAD 2) 60-FOOT “Y” 3) 80- FOOT DIAMETER CUL-DE-SAC FOR DEAD-ENDS WITH CURB AND GUTTER 4) 100-FOOT DIAMETER CUL-DE-SAC FOR DEAD-ENDS WITHOUT CURB AND GUTTER
501 – 750	20	100-FOOTDIAMETER CUL-DE-SAC (ADDITIONAL INTERMEDIATE TURNAROUNDS MAY BE REQUIRED)
OVER 750		SPECIAL FIRE DEPARTMENT APPROVAL IS REQUIRED

Section D103.5 Fire Apparatus Access Road Gates. Amend Section D103.5 to read as follows: “D103.5. Fire Apparatus Access Road Gates. Gates securing the fire apparatus access road shall comply with all of the following criteria:

1. The minimum gate width shall be 16 feet or as wide as necessary to facilitate the required turning radius.
2. Gates shall be of the swinging, sliding, or specifically approved lift type.
3. Construction of gate 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 Knox™ electronic override switch for all inbound directions of travel and any outbound direction of travel where automatic opening of the gate when a vehicle is present does not occur.
6. Manual opening gates shall not be locked with a padlock, or chain and padlock, unless they are provided with a Knox™ padlock in series with the padlock, or chain and padlock.
7. Locking device specifications shall be submitted for approval by the fire code official.
8. Electric gate operators, where provided, shall be listed in accordance with UL 325.
9. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.
10. Electronically operated gates must stay open a minimum of 30 seconds when the Knox™ electronic override switch is turned on/off and must remain in the open position when the switch is turned on and left on.
11. A Knox™ fire department decal shall be placed adjacent to the Knox™ electronic override switch unless other approved fire department marking is provided.”

Section D103.6 Signs. Amend Section D103.6 to read as follows: “D103.6. Fire Apparatus Access Road Marking. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING – FIRE LANE markings consisting of signage complying with Section D103.8 and/or striping complying with Section D103.7. Approved markings shall be posted on one or both sides of the fire apparatus road as required by Sections D103.6.1 through D103.6.3 (all amended Sections, below).”

Figure D103.6 Fire Lane Signs. Delete Figure D103.6. Fire Lane Signs. See new Figure D103.8.

Section D103.6.1 Roads Less Than 28 Feet in Width. Amend Section D103.6.1 to read as follows: “D103.6.1. Roads Less Than 28 Feet in Width. Fire apparatus access roads less than 28 feet in width shall be posted on both sides as a fire lane.”

Section D103.6.2 Roads More Than 28 Feet and Less Than 34 Feet in Width. Amend Section D103.6.2 to read as follows: “D103.6.2. Roads more than 28 feet and less than 34 feet in width. Fire apparatus access roads more than 28 feet and less than 34 feet wide shall be posted on one side of the road as a fire lane.”

Section D103.6.3 Roads 34 Feet in Width or Greater. Add a new Section D103.6.3 to read as follows: “D103.6.3. Roads 34 feet in width or greater. Fire apparatus access roads 34 feet in width or greater do not require marking as a fire lane.”

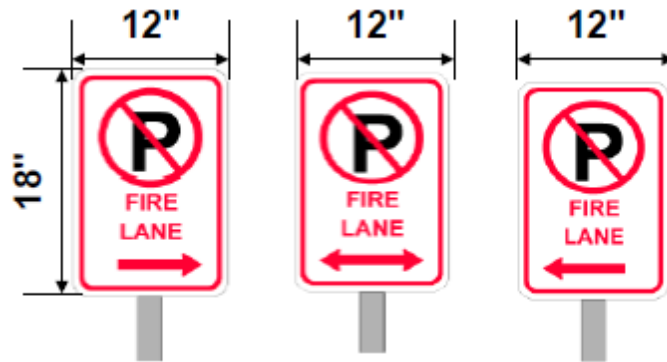
Section D103.7 Striping. Add a new Section D103.7 to read as follows: “D103.7. Striping. When striping is used to identify fire apparatus access roads, the striping shall comply with this Section and Figure D103.7. Striping shall consist of painted lines of red traffic paint six inches in width to show the boundaries of the fire lane. The words “NO PARKING FIRE LANE” shall appear in four inch high white reflective letters having a 3/4 inch stroke and spacing in 25 feet intervals on the red traffic paint. Striping shall be located along one or both sides of the fire lane as required by Section D103.6. Where a curb is available, the striping shall be on the vertical face of the curb.”

Figure D103.7 Fire Lane Striping. Add a new Figure D103.7. Fire Lane Striping. As follows:



Section D103.8 Signage. Add a new Section D103.8 to read as follows: “D103.8. Signage. When signage is used to identify fire lanes, the signage shall comply with this Section and Figure D103.8 or as approved otherwise. Signage shall be permanent, bearing the words “NO PARKING FIRE LANE”. Signage shall have a white background with red letters and borders using not less than two inch lettering and have a minimum dimension of 12 inches wide by eighteen 18 inches high. Signage shall provide directional arrows as applicable unless otherwise permitted. Signage shall be posted on one or both sides of the fire lane as required by Section D103.6. Signage shall indicate the beginning and ending of the fire lane and shall be spaced no more than 100 feet apart. Additional signage may be required at changes in roadway direction. Signage may be installed on permanent buildings or walls in an approved manner or as approved by the fire code official. Signage shall meet applicable requirements of the Federal Highway Administrations Manual on Uniform Traffic Control Devices (MUTCD).”

Figure D103.8 Fire Lane Signage. Add a new Figure D103.8. Fire Lane Signage., as follows:



Section D105 Aerial Fire Apparatus Access Roads. Delete Section D105 in its entirety.

APPENDIX E - HAZARD CATEGORIES

Amend the subtitle of Appendix E to read as follows: *"This appendix is adopted for information purposes."*

APPENDIX F - HAZARD RANKING

Amend the subtitle of Appendix F to read as follows: *"This appendix is adopted for information purposes."*

APPENDIX G - CRYOGENIC FLUIDS-WEIGHT AND VOLUME EQUIVALENTS

Amend the subtitle of Appendix G to read as follows: *"This appendix is adopted for information purposes."*

APPENDIX H - HMMP AND HMIS

Amend the subtitle of Appendix H to read as follows: *"The provisions of this appendix are mandatory and adopted."*