



RESOLUTION NO. 32-2008  
OF THE BOARD OF SUPERVISORS OF THE COUNTY OF EL DORADO

**RATIFICATION OF THE 2007 CALIFORNIA FIRE CODE**

**WHEREAS**, every three to four years the State of California conducts a code adoption process; and,

**WHEREAS**, January 1, 2008, the State of California adopted the 2007 California Code, which includes building, mechanical, electrical, plumbing and fire codes; and,

**WHEREAS**, upon the State's adoption, local jurisdictions may then amend the code to meet local needs.

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Supervisors of the County of El Dorado ratifies the 2007 California Fire Code, as amended and adopted by the El Dorado County Fire Protection District for the territory served by that District.

**BE IT FURTHER RESOLVED**, that the Board of Supervisors of the County of El Dorado delegates the enforcement of the 2007 California Fire Code, as amended, to the Chief of the Fire District, or his or her authorized representative.

**PASSED AND ADOPTED** by the Board of Supervisors of the County of El Dorado at a regular meeting of said Board, held the 26th day of February, 2008, by the following vote of said Board:

**Attest:**

Cindy Keck

Clerk of the Board of Supervisors

by

**Ayes:** Sweeney, Baumann, Dupray, Briggs, Santiago

**Noes:** none

**Absent:** none

Deputy Clerk

Chairman, Board of Supervisors

Rusty Dupray

*I certify that the foregoing instrument is a correct copy of the original on file in this office.*

*Date:*

\_\_\_\_\_

*Attest: Cindy Keck, Clerk of the Board of Supervisors of the County of El Dorado, State of California*

By \_\_\_\_\_

Deputy Clerk

# EL DORADO COUNTY FIRE PROTECTION DISTRICT

## ORDINANCE 2007-01

An ordinance of the El Dorado County Fire District adopting the 2007 edition of the California Fire Code, based upon the 2006 edition of the International Fire Code, regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises in the El Dorado County Fire District; providing for the issuance of permits and collection of fees therefore; repealing Ordinance No. 2003-01 of the El Dorado County Fire District and all other ordinances and parts of the ordinances in conflict therewith.

The Board of Directors of the El Dorado County Fire District does ordain as follows:

### **Section 1**

That a certain document, three (3) copies of which are on file in the office of the Secretary of the Board of Directors of the El Dorado County Fire District, being marked and designated as the California Fire Code, 2007 edition, in its entirety, including all Chapters, Appendix Chapters 1 and 4, and Appendix B, C, D, F and H, based on the 2006 edition of the International Fire Code, (see California Fire Code, Appendix Chapter 1, Section 101.2.1, 2007 edition), as published by the International Code Council, be and is hereby adopted as the Fire Code of the El Dorado County Fire District, in the State of California regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code on file in the office of the El Dorado County Fire District are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Section 2 of this ordinance.

### **Section 2**

#### **California Fire Code, Appendix Chapter 1 Amendments**

##### **Section 101.1 is amended to read as follows: Title.**

Section 101.1 of Appendix Chapter 1 of the Fire Code of the El Dorado County Fire District is amended to read as follows:

**101.1 Title.** These regulations shall be known as the Fire Code of the El Dorado County Fire District hereinafter referred to as "this code."

## **Section 105 Permits**

### **Section 105.6.27 is amended as follows: LP Gas.**

Section 105.6.27 of Appendix Chapter 1 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

#### **105.6.27 – LP Gas**

##### **1. Storage and use of LP-gas**

~~**Exception:** A permit is not required for individual containers with a 500-gallon water capacity or less serving occupancies in Group R-3.~~

## **Section 109 Violations**

### **Section 109.3 is amended as follows: Violation Penalties.**

Section 109.3 of Appendix Chapter 1 of the Fire Code of the El Dorado County Fire District is amended to read as follows:

**Section 109.3 Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a misdemeanor, punishable by a fine of not more than \$1000.00 dollars and/or by imprisonment not exceeding 6 months, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

## **Section 111 Stop Work Order**

### **Section 111.4 is amended as follows: Failure to comply.**

Section 111.4 of Appendix Chapter 1 of the Fire Code of the El Dorado County Fire District is amended to read as follows:

**111.4 Failure to comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be shall be guilty of a misdemeanor, punishable by a fine of not more than \$1000.00 dollars and/or by imprisonment not exceeding 6 months, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

## **California Fire Code, Chapter 1 Amendments-General Code Provisions**

### **Section 101.3.3 is added to read as follows: Application of this code to existing one- and two-family dwellings.**

Section 101.3.3 of Chapter 1 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**101.3.3 Application of this code to existing one- and two-family dwellings.** The application of this code to existing one- and two-family dwellings shall be made with reasonable discretion but at a minimum shall be fully enforced on all substantially remodeled structures. A substantial remodel is defined as a remodel that affects 50% of the existing structure or an addition 50% or greater than the initial square footage. Replacing the roof of an existing one- and two-family dwelling does not qualify as a substantial remodel.

**Section 111.4.7.1 and 111.4.7.2 are added as follows: Fees.**

Sections 111.4.7.1 and 111.4.7.2 of the Chapter 1 of the Fire Code of the El Dorado County Fire District are amended to read as follows:

**111.4.7.1 - Permit, Plan Review and Inspection Fees:** A schedule of fees as adopted by the Fire District Board of Directors for Plan Review, Inspections and the issuance of Permits by the Fire District. This schedule may be found in the most current El Dorado County Fire District fee schedule (Health & Safety Code 17951).

**111.4.7.2- Cost Recovery Fees:** Fire service fees may be charged to any person, firm, corporation or business that through negligence, violation of the law, or as a result of carelessness, is responsible for the cause of the Fire District to respond to the scene of an incident. A district board may charge a fee to cover the cost of any service which the district provides or the cost of enforcing any regulation for which the fee is charged. (Health and Safety Code 13916). The fee shall not exceed the actual cost of suppressing the fire and /or responding to the scene of an incident.

**California Fire Code, Chapter 4 Amendments-Emergency Planning and Preparedness**

**Table 405.2 Footnote “a” is amended as follows: Fire and Evacuation Drill Frequency and Participation**

Table 405.2 Footnote “a” of Chapter 4 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

- a. The frequency in all school levels shall be allowed to be modified in accordance with Section 408.3.2. Secondary level schools need only conduct evacuation drills twice each school year.

**California Fire Code, Chapter 5 Amendments – Fire Service Features**

**Section 503.3.1 is added to read as follows: Prohibition of Unauthorized Signage.**

Section 503.3.1 of Chapter 5 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**503.3.1 Prohibition of Unauthorized Signage:** Posting of any road naming signs not authorized by the fire code official or the jurisdiction shall be prohibited.

**Section 507 – Hazards to Firefighters**

**Section 507.4 is added as follows: Communications:**

Section 507.4 of Chapter 5 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**507.4 Communications.** The ability for emergency response personnel to communicate effectively, by way of existing communications infrastructure shall be provided for and approved to the satisfaction of the AHJ.

## **California Fire Code, Chapter 9 Amendments – Fire Protection Systems**

### **Section 903 – Automatic Sprinkler Systems**

#### **Section 903.2 is amended read as follows: Where required.**

Section 903.2 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**903.2 Where required.**An approved, NFPA 13 automatic sprinkler system shall be required and installed in all buildings or structures, greater than 3600 square feet, when constructed or relocated within the jurisdiction.

#### **Exceptions:**

- 1. One and two family dwellings, where otherwise not required by the AHJ.**
- 2. Agricultural buildings not under Special Use Permit used for commercial purposes.**

#### **Sections 903.2a, 903.2b, and 903.2c are added to read as follows: Status of existing buildings.**

Section 903.2a, 903.2b, 903.2c of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**903.2.a Status of existing buildings greater than 3,600 square feet.** In existing buildings 3600 square feet or greater, other than one-and two-family dwelling units, where the floor area of the building or structure is increased by an addition of more than thirty percent (30%) or 1,800 square feet, whichever is less, such building or structure shall be made to conform to Section 903.2.

**903.2.b Status of existing buildings less than 3,600 square feet.** In existing buildings 3,600 square feet or less, other than one-and two-family dwelling units, where the floor area of the building or structure is increased to a total square footage over 3,600 square feet, by an addition of more than thirty percent (30%) or 1,000 square feet, whichever is less, such building or structure shall be made to conform to Section 903.2.

**903.2.c Status of existing buildings.** When alterations or repairs within any 12-month period exceed fifty percent (50%) of the current assessed value of the existing building or structure, such building or structure shall be made to conform to Section 903.

#### **Section 903.2.7 is amended as follows: Group R**

Section 903.2.7 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**Exceptions:**

1. Detached one- and two-family dwellings and multiple single-family dwellings (town houses) not more than three stories above grade plane and height with a separate means of egress, unless specifically required by other sections of this code, or as required by the AHJ as a means of providing the same practical effect to address fire flow, access or other non-compliance issues, or classified as Group R-4.
2. Group U private garages accessory to a Group R-3 occupancy, unless otherwise required.

**Section 903.2.7.1 is added to read as follows:**

Section 903.2.7.1 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**903.2.7.1 Automatic sprinkler systems installed in Group R, Division 3 occupancies shall conform to the following standards in addition to NFPA Standard 13D, 2002 edition:**

1. Automatic sprinkler system coverage shall be provided throughout the residence to include all closets, bathrooms, garages, and any area used for storage.
  - a. Exception: Small linen closets less than 24 square feet with complete full depth shelving.
2. An exterior bell shall be mounted in a location to be audible from the street upon activation of the required flow switch.
3. An interior horn / strobe shall be mounted in a central location audible from the master bedroom upon activation of the required flow switch.
  - a. Alternative to interior horn / strobe: An acceptable alternative to the interior horn / strobe is to interconnect the flow switch to the hardwired smoke detectors. Upon activation of the flow switch, all smoke detectors shall sound.
4. A sprinkler head shall be mounted on a metal sprig above any attic access openings and where required by the AHJ.
5. All automatic sprinkler systems shall be hydraulically designed and the plans and hydraulic calculations stamped by a California licensed C-16 fire protection contractor or a Professional Engineer.

**The following sections are amended by changing California Fire Code requirements to 3,600 square feet for fire sprinkler installations, as follows (the complete text of the section is not provided):**

<u>903.2.1.1</u>	<u>Group A-1.</u>	<u>Change 12,000 square feet to 3,600 square feet.</u>
<u>903.2.1.2</u>	<u>Group A-2.</u>	<u>Change 12,000 square feet to 3,600 square feet.</u>
<u>903.2.1.3</u>	<u>Group A-3.</u>	<u>Change 12,000 square feet to 3,600 square feet.</u>
<u>903.2.1.4</u>	<u>Group A-4.</u>	<u>Change 12,000 square feet to 3,600 square feet.</u>
<u>903.2.2</u>	<u>Group E.</u>	<u>Change 20,000 square feet to 3,600 square feet.</u>
<u>903.2.3</u>	<u>Group F-1.</u>	<u>Change 12,000 square feet to 3,600 square feet.</u>
<u>903.2.6-1</u>	<u>Group M.</u>	<u>Change 12,000 square feet to 3,600 square feet.</u>
<u>903.2.6-3</u>	<u>Group M.</u>	<u>Change 24,000 square feet to 3,600 square feet.</u>
<u>903.2.8</u>	<u>Group S-1.</u>	<u>Change 12,000 square feet to 3,600 square feet.</u>

**Section 903.3.1.2 is amended to read as follows: NFPA 13R Sprinkler systems.**

Section 903.3.1.2 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**903.3.1.2 NFPA 13R Sprinkler systems.** Where allowed, by the Authority Having Jurisdiction, in buildings of Group R, up to and including four stories in height, automatic sprinkler systems shall be installed throughout in accordance with NFPA 13R.

**Section 903.4 Sprinkler system monitoring and alarms.**

Section 903.4 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**Section 903.4 Sprinkler system monitoring and alarms**

**exceptions 2, 3, 4, 5, 6 and 7 are deleted.**

**Section 905 Standpipe systems**

**Section 905.5.3 is amended as follows: Class II system 1-inch hose.**

Section 905.5.3 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**905.5.3 Class II system 1-inch hose.** A minimum ~~1-inch (25 mm)~~ 1 ½ inch (37.5 mm) hose shall be allowed to be used for hose stations in light-hazard occupancies where investigated and listed for this service and where approved by the fire code official.

**Section 907 – Fire Alarm and Detection Systems**

**Sections 907.2a, 907.2b, 907.2c, 907.2d are added to read as follows:**

Section 907.2a, 907.2b, 907.2c, and 907.2d of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**Section 907.2.a An approved fire alarm/detection system shall be installed in all buildings with a floor area less than 3,600 square feet.**

**Exceptions:**

- 1. One and two family dwellings.**
- 2. Agricultural buildings not under Special Use Permit used for commercial purposes.**
- 3. Buildings with a floor area less than 500 square feet may be exempt, as determined by the Fire Chief, based on building construction material and features, location, occupancy type, and distance to exposures.**

**Section 907.2.b Status of existing buildings.** In existing buildings without an approved automatic sprinkler system, other than one- or two-family dwelling units, where a fire alarm/detection system does not exist and the floor area of the building or structure is increased or modified by more than thirty percent (30%) or 1,000 square feet, whichever is less, such building or structure shall be made to conform to Section 907.

**Section 907.2.c Status of existing buildings and structures** In existing buildings without an approved automatic sprinkler system, when alterations or repairs within any 12 month period exceed fifty percent (50%) of the current assessed value of the existing building or structure, such building or structure shall be made to conform to Section 907.

**Section 907.2.d Monitoring.** All fire alarm/detection systems shall be connected directly through and monitored by a U.L. approved central, proprietary or remote station service, which gives audible and visual signals at a constantly attended location.

**Section 907.2.1 is amended as follows: Group A.**

Section 907.2.1 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**907.2.1 Group A.** A manual fire alarm system shall be installed in Group A occupancies having an occupant load of 300 or more. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

**Exception:** Manual fire alarm boxes ~~are not~~ may be required where the building is equipped throughout with an automatic sprinkler system and the alarm notification appliances will activate upon sprinkler water flow, and at least one manual fire alarm box shall be installed at an approved location.

**Section 907.2.2 is amended as follows: Group B.**

Section 907.2.2 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**907.2.2 Group B.** A manual fire alarm system shall be installed in Group B occupancies having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

**Exception:** Manual fire alarm boxes ~~are not~~ may be required where the building is equipped throughout with an automatic sprinkler system and the alarm notification appliances will activate upon sprinkler water flow, and at least one manual fire alarm box shall be installed at an approved location.

**Section 907.2.3 is amended as follows: Group E.**

Section 907.2.3 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**907.2.3 Group E.** A manual and automatic fire alarm system shall be installed in Group E occupancies with an occupant load of 50 or more persons or containing more than one classroom or one or more rooms used for daycare purposes. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

**Exceptions:**

1. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:



- 1.1. Interior corridors are protected by smoke detectors with alarm verification.
- 1.2. Auditoriums, cafeterias, gymnasiums and the like are protected by heat detectors or other approved detection devices.
- 1.3. Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.
- 1.4. Off-premises monitoring is provided.
- 1.5. The capability to activate the evacuation signal from a central point is provided.
- 1.6. In buildings where normally occupied spaces are provided with a two-way communication system between such spaces and a constantly attended receiving station from where a general evacuation alarm can be sounded, except in locations specifically designated by the fire code official.

2. Manual fire alarm boxes ~~shall not~~ may be required in Group E occupancies where the building is equipped throughout with an approved automatic sprinkler system, provided the notification appliances will activate on sprinkler water flow and at least one manual activation fire alarm box is provided from a normally occupied shall be installed in an approved location.

**Section 907.2.4 is amended as follows: Group F.**

Section 907.2.4 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**907.2.4 Group F.** A manual fire alarm system shall be installed in Group F occupancies that are two or more stories in height and have an occupant load of 500 or more above or below the lowest level of exit discharge.

**Exception:** Manual fire alarm boxes ~~are not~~ may be required where the building is equipped throughout with an automatic sprinkler system and the alarm notification appliances will activate upon sprinkler water flow, and at least one manual fire alarm box shall be installed at an approved location.

**Section 907.2.7 is amended as follows: Group M.**

Section 907.2.7 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**907.2.7 Group M.** A manual fire alarm system shall be installed in Group M occupancies having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge. The initiation of a signal from a manual fire alarm box shall initiate alarm notification appliances as required by Section 907.10.

**Exceptions:**

1. A manual fire alarm system is required in covered mall buildings complying with Section 402 of the International Building Code.

Manual fire alarm boxes ~~are not~~ may be required where the building is equipped throughout with an automatic sprinkler system and the alarm notification appliances will activate upon sprinkler water flow, and at least one manual fire alarm box shall be installed at an approved location.

**Section 907.2.8.1 is amended as follows: Groups R-1 and R-4.**

Section 907.2.8.1 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**907.8.1 Manual fire alarm system.** A manual fire alarm system shall be installed in Groups R-1 and R-4 occupancies.

**Exceptions:** 1. A manual fire alarm system is not required in buildings not more than two stories in height where all individual sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each individual sleeping unit has an exit directly to a public way, exit court or yard.

2. ~~Manual fire alarm boxes are not required throughout the building when the following conditions are met:~~

~~-2.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.~~

~~-2.2. The notification appliances will activate upon sprinkler water flow; and~~

~~-2.3. At least one manual fire alarm box is installed at an approved location.~~ Manual fire alarm boxes are not required throughout the building when the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 provided the notification appliances will activate upon sprinkler water flow and at least one manual fire alarm box is installed at an approved location.

**Section 907.2.9 is amended as follows: Group R-2.**

Section 907.2.9 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**907.2.9 Group R-2.** A manual fire alarm system shall be installed in Group R-2 occupancies where:

1. Any dwelling unit or sleeping unit is located three or more stories above the lowest level of exit discharge;

2. Any dwelling unit or sleeping unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit; or

3. The building contains more than 16 dwelling units or sleeping units.

**Exceptions:** 1. A fire alarm system is not required in buildings not more than two stories in height where all dwelling units or sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public way, exit court or yard.

2. ~~Manual fire alarm boxes are not required throughout the building when the following conditions are met:~~

~~-2.1. The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2; and~~

~~-2.2. The notification appliances will activate upon sprinkler flow.~~ Manual fire alarm boxes are not required throughout the building when the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 provided the notification appliances will activate upon sprinkler water flow and at least one manual fire alarm box is installed at an approved location.

3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1023.6, Exception 4.

## **Section 910 – Smoke and Heat Vents**

### **Section 910.1 is amended as follows: General.**

Section 910.1 of Chapter 9 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**910.1 General.** Where required by this code or otherwise installed, smoke and heat vents or mechanical smoke exhaust systems and draft curtains shall conform to the requirements of this section.

#### **Exceptions:**

1. Frozen food warehouses used solely for storage of Class I and II commodities where protected by an approved automatic sprinkler system.
2. ~~Where areas of buildings are equipped with early suppression fast response (ESFR) sprinklers, automatic smoke and heat vents shall not be required within these areas.~~

## **California Fire Code, Chapter 10 Amendments-Means of Egress**

### **Section 1020 Vertical Exit Enclosures**

#### **Section 1020.1.6 is amended as follows: Stairway floor number signs.**

Section 1020.1.6 of Chapter 10 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**1020.1.6 Stairway floor number signs.** ~~“Three stories”~~ shall read “two stories or more in height when deemed necessary by the Chief.”

## **California Fire Code, Chapter 23 Amendments-High Piled Combustible**

### **Section 2306 General Fire Protection and Life Safety Features**

#### **Table 2306.2 Footnote ‘j’ is amended as follows: General Fire Protection and Life Safety Requirements.**

Table 2306.2 footnote “j” of Chapter 23 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

- ~~j. Not required when storage areas are protected by early suppression fast response (ESFR) sprinkler systems installed in accordance with NFPA 13.~~

## **California Fire Code, Chapter 33 Amendments-Explosives and Fireworks**

### **Section 3301 Explosives and Fireworks General**

#### **Section 3301.2 is added as follows: Where explosives permits required.**

Section 3301.2 of Chapter 33 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**3301.2 Explosives Permits. Where explosives permits are required, they shall be issued by the Fire Chief and the El Dorado County Sheriff's Department/Placerville Police Department.**

### **Section 3308 Fireworks Display, General**

#### **Section 3308.2 is added as follows: Where fireworks permits required.**

Section 3308.2 of Chapter 33 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**3308.2 Fireworks Permits. Where fireworks permits are required, they shall be issued by the Fire Chief and the El Dorado County Board of Supervisors/Placerville City Council.**

## **California Fire Code, Chapter 38 Amendments – Liquefied Petroleum Gases**

### **Section 3801 Liquefied Petroleum Gases, General**

#### **Section 3801.4 is added to read as follows: Standard.**

Section 3801.4 of Chapter 38 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**3801.4 Standard. The installation of Liquefied Petroleum Gas containers shall meet the requirements of NFPA 58 and the Authority Having Jurisdiction.**

### **Section 3804 Location of Containers**

#### **Table 3804.3, footnote <sup>d</sup> is amended as follows:**

Section 3804.3 of Chapter 38 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**3804.3 Footnote "d". 500 gallons becomes 250 gallons. Installation of DOT tanks, with setbacks from structures less than 10 feet, must be approved by the AHJ.**

### **Section 3812 to added as follows: High Altitude Liquefied Petroleum Gas Installations (4,000' and Above).**

#### **Section 3812.1 is added as follows: Regulators.**

Section 3812.1 of Chapter 38 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**3812.1 Regulators.** Two-stage regulator system shall be installed in accordance with manufacturer requirements.

1. First stage regulator and connecting pigtail shall be installed under a protective valve cover on the tank. The mounting position of the first stage regulator shall be listed for this application.

**Section 3812.2 is added as follows: Vertical Yard Riser Piping.**

Section 3812.2 of Chapter 38 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**3812.2 Vertical Riser Piping.**

1. Minimum of Schedule 40-iron piping.
2. Riser shall be within 3 inches horizontally of the tank.
3. Swing joints shall be installed above and below tank level to provide for the tank movement. (Street elbows shall not be used.)
4. A listed flexible riser constructed of copper or stainless steel tubing and protected by a steel covered sheathed material may be used instead of swing joints. The flexible alternative shall provide sufficient slack to allow for tank movement.

**Section 3812.3 is added as follows: Second Stage Regulators.**

Section 3812.3 of Chapter 38 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**3812.3 Second Stage Regulators.**

1. The riser and second stage regulator shall be installed on the gable end of the building as close as practical to the building wall.  
Exception: If not feasible due to structural or topographical constraints.
2. The riser shall be equipped with a listed gas shut off valve prior to the second stage regulator.
3. A protective cover shall be installed over the second stage regulator and meter (if installed) at the building. The minimum design for the protective cover and support structure shall be equal to or greater than the building design load as determined by the Building Department. The support structure shall be securely attached to the building wall or ground surface.
4. Riser piping shall not be embedded in asphalt or concrete.  
Exception: If 1 inch of annular clearance is maintained from all side of the piping.

**Section 3812.4 is added as follows: Markings and Locations.**

Section 3812.4 of Chapter 38 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**3812.4 Marking and Locations.**

1. An approved sign shall be located directly above the riser shut off valve on the building in a visible location.
2. The liquefied petroleum gas supplier shall affix a weatherproof identification tag to the inside of the tank valve protecting cover. This tag shall contain the supplier's name and emergency telephone number.

3. Tank installation shall be permanently marked by a metal or wood material snow marker, with a minimum dimension of 2 inches by 2 inches. The snow marker shall be of sufficient height to rise above the annual snow depth and shall be a minimum of 10 feet in height. The snow markers shall be painted yellow and located on opposite ends of the tank.

**Section 3812.5 is added as follows: Tank Supports.**

Section 3812.5 of Chapter 38 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**3812.5 Tank Supports. All tank installations shall be placed on approved reinforced concrete supports.**

**Section 3813 is added as follows: Underground Liquefied Petroleum Gas Tank Installations.**

Section 3813 of Chapter 38 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**Section 3813 underground Liquefied Petroleum Gas Tank Installations.**

**Section 3813.1 is added as follows: Permits and Plans.**

Section 3813 of Chapter 38 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**3813.1 Permits and Plans. For a permit to install or maintain an underground LP gas container see Section 105.8.1.1. Plans shall be submitted for all underground tank installations and approved by the AHJ.**

**California Fire Code Appendix C Fire Hydrant Locations and Distribution**

**Table 105.1 is amended as follows: to read:**

Appendix C Table 105.1 of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

FIRE FLOW REQUIREMENTS (GPM)	MINIMUM NO. OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS <sup>a,b,c,d</sup> (FEET)	MAXIMUM DISTANCE FROM HYDRANT TO ANY OR ROADWAY FRONTAGE
1750 or less	1	300	150
2000-2450	2	300	150
2500-2950	3	300	150
3000-3450	3	300	150
3500-4450	4	300	150
4500-5450	5	300	150
5500-5950	6	300	150
6000-6450	6	250	150
6500-7450	7	250	150
7500 or more	8 or more - <sup>e</sup>	200	120

- <sup>a</sup> Reduce by 100 feet for dead end streets or roadways.
- <sup>b</sup> Where streets are provided with median dividers which can be crossed by firefighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 300 feet on each side of the street and be arranged on an alternating basis up to a fire flow of 7,000 gallons per minute.
- <sup>c</sup> Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants should be provided not less 1,000-foot spacing to provide for transportation hazards.
- <sup>d</sup> Average spacing between hydrants may be extended to 500 feet on residential streets and 1,000 feet when parcels are greater than two acres.
- <sup>e</sup> One hydrant for each 1000 gpm or fraction thereof.

## **California Fire Code Appendix D – Fire Apparatus Access Roads**

### **Section D103 Minimum Specifications**

#### **Section D103.6.1 is amended as follows: Roads 20 to 29 feet in width.**

Section D103.6.1 of Appendix D of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**D103.6.1 Roads 20 to 29 feet in width. Fire apparatus access roads 20 to 29 feet shall be posted on both sides as a fire lane, with no parking allowed.**

#### **Section D103.6.2 is amended as follows: Roads from 30 to 39 feet in width.**

Section D103.6.2 of Appendix D of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**D103.6.2 Roads form 30 to 39 feet in width. Fire apparatus access roads 30 to 39 feet shall be posted on one side as a fire lane, with no parking allowed on one side.**

#### **Section D103.6.3 is amended as follows: Roads 40 feet and greater width.**

Section D103.6.3 of Appendix D of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**D103.6.3 Roads 40 feet and greater width. Fire apparatus roads 40 feet and greater may allow parking on both sides of the roadway.**

### **Section D 104 Commercial and Industrial Developments**

#### **Section D104.2 is amended by deleting the exception as follows: exception.**

Section D104.2 of Appendix D of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

#### **D104.2 Buildings exceeding 62,000 square feet in area.**

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

**Section D104.4 is added as follows: Secondary fire apparatus access.**

Section D104.4 of Appendix D of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**D104.4 Secondary fire apparatus access. May be required on any project as required, when in the opinion of the Fire Chief or his designee, secondary access/egress is necessary to provide for public safety.**

**Section D 106 Multiple-Family Residential Developments**

**Section D106.1 to be amended as follows: Projects having more than 100 dwelling units.**

Section D106.1 of Appendix D of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**Section D106.1 Projects having more than 100 dwelling units.**

~~Exception: Projects having up to 200 dwelling units may have a single approved fire apparatus access road when all buildings, including non-residential occupancies, are equipped throughout with approved automatic sprinkler systems installed in accordance with section 903.3.1.1 or 903.3.1.2.~~

**Section D 107 One-or Two-Family Residential Developments**

**Section D107.1 to be amended as follows: One or two- family dwelling residential developments.**

Section D106.1 of Appendix D of the Fire Code of the El Dorado County Fire District is amended to read as follows, based on climatic, geological and topographical conditions:

**D107.1 One-or two-family dwelling residential developments.** Developments of one- or two-family dwellings where the number of dwelling units exceed 30 25 shall be provided with separate and approved fire apparatus access roads and shall meet the requirements of section D104.3.

~~Exception: When there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with section 903.3.1.1, 903.3.1.2 or 903.3.1.3, access from two directions shall not be required.~~

**Section 3**

**Establishing Limits**

That the geographic limits referred to in certain sections of the Fire Code of El Dorado County Fire District are hereby established as follows:

**Section 3204.3.1.1 - Geographic limits in which storage of flammable cryogenic fluids in stationary containers is prohibited:**



The limits referred to in Section 3204.3.1.1 of the Fire Code of the El Dorado County Fire District in which storage of flammable cryogenic fluids in stationary containers is prohibited are hereby established as the limits of the El Dorado County Fire District, County of El Dorado.

The storage of flammable cryogenic fluids in stationary containers is allowed in an AHJ approved Commercial, Industrial Zone with a Special / Conditional Use Permit issued by the County of El Dorado/City of Placerville.

**Sections 3404.2.9.5.1 - Geographic limits in which flammable or combustible liquids in above-ground tanks outside of buildings is prohibited:**

The limits, referred to in Sections 3404.2.9.5.1 of the Fire Code of the El Dorado County Fire District in which the storage of Class I flammable liquids or Class II combustible liquids in above-ground tanks outside of buildings is restricted, are hereby established as the limits of the El Dorado County Fire District, County of El Dorado.

The storage of Class I flammable liquids or Class II combustible liquids in above-ground tanks outside of buildings is allowed in an AHJ approved Commercial, Industrial Zone with a Special / Conditional Use Permit issued by the County of El Dorado/City of Placerville.

**Sections 3406.2.4.4 - Geographic limits in which flammable or combustible liquids in above-ground tanks is prohibited:**

The limits, referred to in Sections 3406.2.4.4 of the Fire Code of the El Dorado County Fire District in which the storage of Class I flammable liquids or Class II combustible liquids in above-ground tanks is restricted, are hereby established as the limits of the El Dorado County Fire District, County of El Dorado.

The storage of Class I flammable liquids or Class II combustible liquids in above-ground tanks is allowed in an AHJ approved Commercial, Industrial Zone with a Special / Conditional Use Permit issued by the County of El Dorado/City of Placerville.

**Section 3804.2 - Geographic limits in which storage of liquefied petroleum gases is to be restricted for the protection of heavily populated and congested areas:**

The limits, referred to in Section 3804.2 of the California Fire Code, in which storage of liquefied petroleum gas in excess of an aggregate of 2,000 gallons water capacity is restricted, are hereby established as limits of the El Dorado County Fire District, County of El Dorado.

1. The storage of liquefied petroleum gas in excess of an aggregate of 2,000 gallons water capacity in an Industrial Zone, when located at least one-half (1/2) mile from property zoned or designated for residential use and at least one-half (1/2) mile from existing residential development with a density greater than one (1) dwelling unit per acre and at least one-half (1/2) mile from any hotel or motel is allowed when AHJ approved and a Special / Conditional Use Permit is issued by the County of El Dorado/City of Placerville.

2. The storage of liquefied petroleum gas in excess of an aggregate of 2,000 gallons water capacity is allowed in a Commercial Zone when AHJ approved and a Special / Conditional Use Permit is issued by the County of El Dorado/City of Placerville.

#### **Section 4.**

That Ordinance No. 2003-02 of the El Dorado County Fire District entitled 2001 California Fire Code Adoption 2003-02 and all other ordinances or parts of ordinances in conflict herewith are hereby repealed.

**Section 5.** That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The El Dorado County Fire District Board of Directors hereby declares that it would have passed this ordinance, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

**Section 6.** That nothing in this ordinance or in the Fire Code hereby adopted shall be construed to affect any suit or proceeding impending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Section 4 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

**Section 7.** That the Secretary to Board of Directors, of the El Dorado County Fire District is hereby ordered and directed to cause this ordinance to be published.

**Section 8.** That this ordinance and the rules, regulations, provisions, requirements, orders and matters established and adopted hereby shall take effect and be in full force and effect 30 days from and after the date of its final passage and adoption, but not before January 1, 2008.

The above Ordinance was introduced at a meeting of the Board of Directors of the El Dorado County Fire District on November 14<sup>th</sup> 2007 and it was than read for the first time. The Ordinance was read for the second time on December 12<sup>th</sup> 2007 and approved by the following vote.

AYES: 4

NOES: 0


ABSENT: 1

ABSTAIN: 0

The motion having a majority of votes "AYE", the Ordinance was declared to have been adopted and it was so ordered.

  
\_\_\_\_\_  
Chairman, Board of Directors

ATTEST:

  
Secretary to the Board of  
Directors

## RESOLUTION 2007-15

### A RESOLUTION OF THE BOARD OF DIRECTORS OF THE EL DORADO COUNTY FIRE PROTECTION DISTRICT, ADOPTING FINDINGS SUPPORTING AMENDMENTS TO THE 2007 CALIFORNIA FIRE CODE

**WHEREAS**, the District intends to adopt an ordinance adopting the California Fire Code, 2007 Edition, and prescribing regulations governing conditions hazardous to life, property and the environment from fire, explosion, hazardous materials and hazardous uses; and

**WHEREAS**, the unique local climatic, geological, and topographical conditions existing within the boundaries of the District make it reasonably necessary for the District to impose more stringent requirements than set forth in the California Fire Code and pursuant to California Health and Safety Code sections 13869.7 and 17958.7, the District desires to make express findings to the effect.

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Directors of the El Dorado County Fire District hereby adopts the following findings concerning current unique local conditions that together make each modification to the California Fire Code, 2007 Edition, reasonably necessary to provide adequate and effective protection of life, property and the environment.

**General.** After due consideration, the Board of Directors of the El Dorado County Fire District, hereby finds that due to local climatic, geologic and topographic conditions, as stated within this document, there is a need to provide the modifications and changes contained in the adoptive Ordinance of the 2007 California Fire Code. Such changes are deemed to be reasonably necessary to provide adequate and effective protection of life, property and the environment.

**Climatic.** The weather patterns with the El Dorado County Fire District are considered variable. The normal year's rainfall is approximately 50 inches, while the summer condition is often hot and dry with temperatures over 100 degrees at times. This combination often created hazardous fuel conditions in the El Dorado County Fire District. Drying winds in the summer and fall months reduce fuel moisture and relative humidity to the minimum levels, thereby creating ideal fire weather conditions.

**Geologic.** The El Dorado County Fire District is geologically mixed. Much of the El Dorado County Fire District is precipitous hilly areas where escape opportunities from residential structures are limited to one side of the home only. The steepness and uneven nature of the land often hinders, and sometimes prevents, the erecting of rescue ladders at the side of a home on a hillside parcel. The El Dorado County Fire District is located within a moderate activity seismic Zone Three. The seismic, geological conditions present a potential for multiple fires, major breakage of water mains, multiple electrical power failures, multiple collapsed structures and a large number of calls for emergency medical aid, all of which may occur simultaneously during a seismic event. Landslides have also been experienced in the El Dorado County Fire District in recent years. While stabilization of hillsides can sometimes be achieved, heavy rainfalls have caused failures. These slides can close roadways, making accessibility to many locations in the El Dorado County Fire District impossible until properly cleared.

**Topographic.** The El Dorado County Fire District is protected by a part-paid and part-volunteer fire department. The District is accessible only from the outside by one State Highway and one U.S. Highway. Highway 50 corridor goes directly through the El Dorado County Fire District and at times may be closed by snow or mudslides. This can make access to many parts of the El Dorado County Fire District difficult. Vehicular access is affected by steep hilly terrain and many secondary ridgelines. Many streets are narrow and winding, restricting the speed at which fire apparatus may safely respond which increases the time lapse between fire detection and apparatus arrival. This delayed response may increase the time a family will face the fire or other emergency on their own.

The El Dorado County Fire District has many dead-end streets; this can restrict the ease of relocation of fire and rescue equipment from one location to another, even though actual separating distance between two areas may be minimal. In addition to restricting access routed for fire apparatus, the dead-end streets also limit egress opportunities for residents. Many of the commercial buildings in the El Dorado County Fire District were largely built long before present code requirements existed. Consequently, many of these structures do not meet even minimal standards of fire protection and life safety. Wood frame construction of older buildings, especially those in mountainous areas, creates an adverse exposure problem, not only in being easily ignited by an adjacent structure fire, but also in contributing to the extension of fire to other buildings through radiation, actual physical heat conduction and flying embers. Fire history in the El Dorado County Fire District has shown flying embers will start secondary fires after being blown in the air. Though out the El Dorado County Fire District there are areas in which there are no water mains constructed at all.

The foregoing resolution was passed and adopted by the Board of Directors of the El Dorado County Fire Protection District at a meeting of said Board held on the 14<sup>th</sup> day of November 2007 by the following vote:

AYES: 5  
NOES: 0  
ABSENT: 0

ATTEST:



Edward Courtial, President



Patti Kellogg  
Administrative Assistant