

## CALIFORNIA FIRE CODE – MATRIX ADOPTION TABLE

### CHAPTER 5 – FIRE SERVICE FEATURES

(Matrix Adoption Tables are nonregulatory, intended only as an aid to the code user.  
See Chapter 1 for state agency authority and building applications.)

Adopting Agency	BSC	BSC- CG	SFM		HCD			DSA		OSHDPD						BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
			T-24	T-19*	1	2	1/AC	AC	SS	1	1R	2	3	4	5								
Adopt Entire Chapter																							
Adopt Entire Chapter as amended (amended sections listed below)			X																				
Adopt only those sections that are listed below																							
[California Code of Regulations, Title 19, Division 1]				X																			
Chapter / Section																							
503			†																				
[T-19 §3.05 (a)]				X																			
503.5.2			X																				
[T-19 §3.05 (b)]				X																			
504.4			X																				
507.2.1			X																				
507.3			X																				
507.5			X																				
507.5.1			X																				
507.5.3			X																				
508.1			X																				
508.1.2			X																				
508.1.5			X																				
508.1.6			X																				
508.1.8			X																				
510.2			†																				

This section is not adopted by the state so local districts need to adopt it for Apparatus Access Roads.

\* The California Code of Regulations (CCR), Title 19, Division 1 provisions that are found in the California Fire Code are a reprint from the current CCR, Title 19, Division 1 text for the code user's convenience only. The scope, applicability and appeals procedures of CCR, Title 19, Division I remain the same.

The state agency does not adopt sections identified by the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.



## FIRE SERVICE FEATURES

## User notes:

**About this chapter:**

Chapter 5 provides requirements that apply to all buildings and occupancies and pertain to access roads, access to building openings and roofs, premises identification, key boxes, fire protection water supplies, fire command centers, fire department access to equipment and emergency responder communications enhancement coverage in buildings. Although many safety features are part of the building design, features such as proper fire department access roads and communication coverage are necessary in case of emergency and are important tools for emergency responders for public safety and their own safety.

**SECTION 501—GENERAL**

**501.1 Scope.** Fire service features for buildings, structures and premises shall comply with this chapter.

**501.2 Permits.** A permit shall be required as set forth in Sections 105.5 and 105.6.

**501.3 Construction documents.** Construction documents for proposed fire apparatus access, location of fire lanes, security gates across fire apparatus access roads and construction documents and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.

**501.3.1 Site safety plan.** The owner or owner's authorized agent shall be responsible for the development, implementation and maintenance of an approved written site safety plan in accordance with Section 3303.

**501.4 Timing of installation.** Where fire apparatus access roads or a water supply for fire protection are required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except where approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection where construction of new roadways allows passage by vehicles in accordance with Section 505.2.

**SECTION 502—DEFINITIONS**

**502.1 Definitions.** The following terms are defined in Chapter 2:

AGENCY.

FIRE APPARATUS ACCESS ROAD.

FIRE COMMAND CENTER.

FIRE DEPARTMENT MASTER KEY.

FIRE LANE.

KEY BOX.

TRAFFIC CALMING DEVICES.

This section is not adopted by the state so local districts need to adopt it for Apparatus Access Roads.

**SECTION 503—FIRE APPARATUS ACCESS ROADS**

**503.1 Where required.** Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3.

**503.1.1 Buildings and facilities.** Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

**Exceptions:**

1. The fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where any of the following conditions occur:
  - 1.1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
  - 1.2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
  - 1.3. There are not more than two Group R-3 or Group U occupancies.
2. Where approved by the fire code official, fire apparatus access roads shall be permitted to be exempted or modified for solar photovoltaic power generation facilities.

**503.1.2 Additional access.** The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

**503.1.3 High-piled storage.** Fire department vehicle access to buildings used for high-piled combustible storage shall comply with the applicable provisions of Chapter 32.

**503.2 Specifications.** Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8.

**[California Code of Regulations, Title 19, Division 1, §3.05(a)] Fire Department Access and Egress. (Roads)**

*(a) Roads. Required access roads from every building to a public street shall be all-weather hard-surfaced (suitable for use by fire apparatus) right-of-way not less than 20 feet in width. Such right-of-way shall be unobstructed and maintained only as access to the public street.*

**Exception:** The enforcing agency may waive or modify this requirement if in his opinion such all-weather hard-surfaced condition is not necessary in the interest of public safety and welfare.

**503.2.1 Dimensions.** Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

**503.2.2 Authority.** The fire code official shall have the authority to require or permit modifications to the required access widths where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

**503.2.3 Surface.** Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

**503.2.4 Turning radius.** The required turning radius of a fire apparatus access road shall be determined by the fire code official.

**503.2.5 Dead ends.** Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus.

**503.2.6 Bridges and elevated surfaces.** Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HB-17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges where required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces that are not designed for such use, approved barriers, approved signs or both shall be installed and maintained where required by the fire code official.

**503.2.7 Grade.** The grade of the fire apparatus access road shall be within the limits established by the fire code official based on the fire department's apparatus.

**503.2.8 Angles of approach and departure.** The angles of approach and departure for fire apparatus access roads shall be within the limits established by the fire code official based on the fire department's apparatus.

**503.3 Marking.** Where required by the fire code official, approved signs or other approved notices or markings that include the words "NO PARKING—FIRE LANE" shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility. **ADD: Vehicle code section 22500.1 / 22658(a)**

**503.4 Obstruction of fire apparatus access roads.** Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Sections 503.2.1 and 503.2.2 shall be maintained at all times.

**503.4.1 Traffic calming devices.** Traffic calming devices shall be prohibited unless approved by the fire code official.

**503.5 Required gates or barricades.** The fire code official is authorized to require the installation and maintenance of gates or other approved barricades across fire apparatus access roads, trails or other accessways, not including public streets, alleys or highways. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

**503.5.1 Secured gates and barricades.** Where required, gates and barricades shall be secured in an approved manner. Roads, trails and other accessways that have been closed and obstructed in the manner prescribed by Section 503.5 shall not be trespassed on or used unless authorized by the owner and the fire code official.

**Exception:** The restriction on use shall not apply to public officers acting within the scope of duty.

**503.5.2 Fences and Gates.** School grounds may be fenced and gates therein may be equipped with locks, provided that safe dispersal areas based on 3 square feet (0.28 m<sup>2</sup>) per occupant are located between the school and the fence. Such required safe dispersal areas shall not be located less than 50 feet (15 240 mm) from school buildings.

Every public and private school shall conform with Section 32020 of the Education Code which states:

*The governing board of every public school district, and the governing authority of every private school, which maintains any building used for the instruction or housing of school pupils on land entirely enclosed (except for building walls) by fences or walls, shall, through cooperation with the local law enforcement and fire-protection agencies having jurisdiction of the area, make provision for the erection of gates in such fences or walls. The gates shall be of sufficient size to permit the entrance of the ambulances, police equipment and firefighting apparatus used by the law*

enforcement and fire-protection agencies. There shall be no less than one such access gate and there shall be as many such gates as needed to assure access to all major buildings and ground areas. If such gates are to be equipped with locks, the locking devices shall be designed to permit ready entrance by the use of the chain or bolt-cutting devices with which the local law enforcement and fire-protection agencies may be equipped.

**503.6 Security gates.** The installation of security gates across a fire apparatus access road shall be approved by the fire code official. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

## SECTION 504—ACCESS TO BUILDING OPENINGS AND ROOFS

**504.1 Required access.** Exterior doors and openings required by this code or the *California Building Code* shall be maintained with ready access for emergency access by the fire department. An approved access walkway leading from fire apparatus access roads to exterior openings shall be provided where required by the fire code official.

**[California Code of Regulations, Title 19, Division 1, §3.05(b)] Fire Department Access and Egress. (Roofs)**

**(b) Roofs.** No person shall install or maintain any security barrier such as barbed wire fencing, razor wire fencing, chain link fencing or any other fencing material, cable, aerial, antenna or other obstruction on the roof of any commercial establishment in such a manner as to obstruct or render egress or access hazardous in the event of fire or other emergency.

**Exception:** Guy wire, rods and aerial antenna masts may be attached to a roof structure having a slope of less than 30 degrees provided there is full clearance of seven feet or more between the roof and said obstruction. Guy wire or rods required to support aerial or antenna masts may be attached to a roof structure a lateral distance from the mast not in excess of one-sixth the height of the mast.

**504.2 Maintenance of exterior doors and openings.** Exterior doors and their function shall not be eliminated without prior approval. Exterior doors that have been rendered nonfunctional and that retain a functional door exterior appearance shall have a sign affixed to the exterior side of the door with the words "THIS DOOR BLOCKED." The sign shall consist of letters having a principal stroke of not less than  $\frac{3}{4}$  inch (19.1 mm) wide and not less than 6 inches (152 mm) high on a contrasting background. Required fire department access doors shall not be obstructed or eliminated. Exit and exit access doors shall comply with Chapter 10. Access doors for high-piled combustible storage shall comply with Section 3206.7.

**504.3 Stairway access to roof.** New buildings four or more stories above grade plane, except those with a roof slope greater than 4 units vertical in 12 units horizontal (33.3-percent slope), shall be provided with a stairway to the roof. Stairway access to the roof shall be in accordance with Section 1011.12. Such stairway shall be marked at street and floor levels with a sign indicating that the stairway continues to the roof. Where the roof is a vegetative roof, includes a landscaped roof area, or is used or for other purposes, stairways shall be provided as required for such occupancy classification.

**504.4 Roof access.** No person shall install or maintain any security barrier such as barbed wire fencing, razor wire fencing, chain link fencing or any other fencing material, cable, aerial, antenna or other obstruction on the roof of any commercial establishment in such a manner as to obstruct or render egress or access hazardous in the event of fire or other emergency.

**Exception:** Guy wire, rods and aerial antenna masts may be attached to a roof structure having a slope of less than 30 degrees provided there is full clearance of 7 feet or more between the roof and said obstruction. Guy wire or rods required to support aerial or antenna masts may be attached to a roof structure a lateral distance from the mast not in excess of one-sixth the height of the mast.

ADD: 6" for Commercial 12" for Industrial

## SECTION 505—PREMISES IDENTIFICATION

**505.1 Address identification.** New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) high with a minimum stroke width of  $\frac{1}{2}$  inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

**505.2 Street or road signs.** Streets and roads shall be identified with approved signs. Temporary signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs shall be of an approved size, weather resistant and be maintained until replaced by permanent signs.

This section is not adopted by the state so local districts need to adopt it for Key Boxes requirements.

## SECTION 506—KEY BOXES

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

**506.1.1 Locks.** An approved lock shall be installed on gates or similar barriers where required by the fire code official.



**506.1.2 Key boxes for nonstandardized fire service elevator keys.** Key boxes provided for nonstandardized fire service elevator keys shall comply with Section 506.1 and all of the following:

1. The key box shall be compatible with an existing rapid entry key box system in use in the jurisdiction and approved by the fire code official.
2. The front cover shall be permanently labeled with the words "FIRE DEPARTMENT USE ONLY—ELEVATOR KEYS."
3. The key box shall be mounted at each elevator bank at the lobby nearest to the lowest level of fire department access.
4. The key box shall be mounted 5 feet 6 inches (1676 mm) above the finished floor to the right side of the elevator bank.
5. Contents of the key box are limited to fire service elevator keys. Additional elevator access tools, keys and information pertinent to emergency planning or elevator access shall be permitted where authorized by the fire code official.
6. In buildings with two or more elevator banks, a single key box shall be permitted to be used where such elevator banks are separated by not more than 30 feet (9144 mm). Additional key boxes shall be provided for each individual elevator or elevator bank separated by more than 30 feet (9144 mm).

**Exception:** A single key box shall be permitted to be located adjacent to a fire command center or the nonstandard fire service elevator key shall be permitted to be secured in a key box used for other purposes and located in accordance with Section 506.1.

**506.2 Key box maintenance.** The operator of the building shall immediately notify the fire code official and provide the new key where a lock is changed or rekeyed. The key to such lock shall be secured in the key box.

## SECTION 507—FIRE PROTECTION WATER SUPPLIES

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

**507.2 Type of water supply.** A water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

**507.2.1 Private fire service mains.** Private fire service mains and appurtenances shall be installed in accordance with NFPA 24 as amended in Chapter 80.

**507.2.2 Water tanks.** Water tanks for private fire protection shall be installed in accordance with NFPA 22.

**507.3 Fire flow.** Fire-flow requirements for buildings or portions of buildings and facilities shall be determined by an approved method or Appendix B.

**507.4 Water supply test.** The fire code official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the fire code official or approved documentation of the test shall be provided to the fire code official prior to final approval of the water supply system.

**507.5 Fire hydrant systems.** Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6 and Appendix C or by an approved method.

**507.5.1 Where required.** Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

**Exception:** For Group R-3 and Group U occupancies, equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, the distance requirement shall be not more than 600 feet (183 m).

**507.5.1.1 Hydrant for standpipe systems.** Buildings equipped with a standpipe system installed in accordance with Section 905 shall have a fire hydrant within 100 feet (30 480 mm) of the fire department connections.

**Exception:** The distance shall be permitted to exceed 100 feet (30 480 mm) where approved by the fire code official.

**507.5.2 Inspection, testing and maintenance.** Fire hydrant systems shall be subject to periodic tests as required by the fire code official. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective. Additions, repairs, alterations and servicing shall comply with approved standards. Records of tests and required maintenance shall be maintained.

**507.5.3 Private fire service mains and water tanks.** Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with California Code of Regulations, Title 19, Division 1, Chapter 5.

1. Private fire hydrants of all types: Inspection annually and after each operation; flow test and maintenance annually.
2. Fire service main piping: Inspection of exposed, annually; flow test every 5 years.
3. Fire service main piping strainers: Inspection and maintenance after each use.

Records of inspections, testing and maintenance shall be maintained.

**507.5.4 Obstruction.** Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

**507.5.5 Clear space around hydrants.** A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants, except as otherwise required or approved.

## User notes:

**About this chapter:**

Chapter 12 was added to address the current energy systems found in this code, and is provided for the introduction of a wide range of systems to generate and store energy in, on and adjacent to buildings and facilities. The expansion of such energy systems is related to meeting today's energy, environmental and economic challenges. Ensuring appropriate criteria to address the safety of such systems in building and fire codes is an important part of protecting the public at large, building occupants and emergency responders. More specifically, this chapter addresses standby and emergency power, portable generators, photovoltaic systems, fuel cell energy systems and energy storage systems.

**SECTION 1201—GENERAL**

**1201.1 Scope.** The provisions of this chapter shall apply to the installation, operation, maintenance, repair, retrofitting, testing, commissioning and decommissioning of energy systems used for generating or storing energy, including but not limited to energy storage systems under the exclusive control of an electric utility or lawfully designated agency. It shall not apply to equipment associated with the generation, control, transformation, transmission, or distribution of energy installations that is under the exclusive control of an electric utility or lawfully designated agency. Energy storage systems regulated by Section 1207 shall comply with this chapter, as appropriate, and NFPA 855.

**1201.2 Electrical wiring and equipment.** Electrical wiring and equipment used in connection with energy systems shall be installed and maintained in accordance with this chapter, Section 603 and *the California Electrical Code*.

**1201.3 Mixed system installation.** Where mixed systems are approved, the aggregate nameplate kWh energy of all energy storage systems in a fire area shall not exceed the maximum quantity specified for any of the energy systems in this chapter. Where required by the fire code official, a hazard mitigation analysis shall be provided and approved in accordance with Section 104.2.2 to evaluate any potential adverse interaction between the various energy systems and technologies.

**SECTION 1202—DEFINITIONS**

**1202.1 Definitions.** The following terms are defined in Chapter 2:

BATTERY SYSTEM, STATIONARY STORAGE.

BATTERY TYPES.

CAPACITOR ENERGY STORAGE SYSTEM.

CRITICAL CIRCUIT.

EMERGENCY POWER SYSTEM.

ENERGY STORAGE MANAGEMENT SYSTEMS.

ENERGY STORAGE SYSTEM (ESS).

ENERGY STORAGE SYSTEM, ELECTROCHEMICAL.

ENERGY STORAGE SYSTEM, MOBILE.

ENERGY STORAGE SYSTEM, WALK-IN UNIT.

ENERGY STORAGE SYSTEM CABINET.

ENERGY STORAGE SYSTEM COMMISSIONING.

ENERGY STORAGE SYSTEM DECOMMISSIONING.

FUEL CELL POWER SYSTEM, STATIONARY.

PORTABLE GENERATOR.

STANDBY POWER SYSTEM.

1201.4 is added to the code for labeling requirements. these requirements are in the California Electrical code. Adding them in the fire code makes it easy for fire inspectors to find and inspect for compliance.

**SECTION 1203—EMERGENCY AND STANDBY POWER SYSTEMS**

**1203.1 General.** Emergency power systems and standby power systems required by this code or the *California Building Code* shall comply with Sections 1203.1.1 through 1203.1.9.

**1203.1.1 Stationary generators.** Stationary emergency and standby power generators required by this code shall be listed in accordance with UL 2200.

**1203.1.2 Fuel line piping protection.** Fuel lines supplying a generator set inside a high-rise building or new Group I-2 occupancy having occupied floors located more than 75 feet above the lowest level of fire department vehicle access shall be separated from areas of the building other than the room the generator is located in by one of the following methods:

1. A fire-resistant pipe-protection system that has been tested in accordance with UL 1489. The system shall be installed as tested and in accordance with the manufacturer's installation instructions, and shall have a rating of not less than 2 hours. Where the building is protected throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, the required rating shall be reduced to 1 hour.
2. An assembly that has a fire-resistance rating of not less than 2 hours. Where the building is protected throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, the required fire-resistance rating shall be reduced to 1 hour.
3. Other approved methods.

**1203.1.3 Installation.** Emergency power systems and standby power systems shall be installed in accordance with the *California Building Code*, the *California Electrical Code*, NFPA 110 and NFPA 111.

**1203.1.3.1 Combustion engines and gas turbines.** The installation of combustion engines and gas turbines shall be in accordance with *California Building Code* Section 442 and NFPA 37.

**1203.1.4 Load transfer.** Emergency power systems shall automatically provide secondary power within 10 seconds after primary power is lost, unless specified otherwise in this code. Standby power systems shall automatically provide secondary power within 60 seconds after primary power is lost, unless specified otherwise in this code.

**1203.1.5 Load duration.** Emergency power systems and standby power systems shall be designed to provide the required power for a minimum duration of 2 hours without being refueled or recharged, unless specified otherwise in this code.

**1203.1.5.1 High-rise buildings and Group I-2 occupancies having occupied floors located more than 75 feet above the lowest floor level having building access.** Emergency power systems and standby power systems shall be designed to provide the required power for a minimum duration of 6 hours without being refueled or recharged. The minimum required fuel supply shall be maintained at all times.

**1203.1.6 Uninterruptable power source.** An uninterrupted source of power shall be provided for equipment where required by the manufacturer's instructions, the listing, this code or applicable referenced standards.

**1203.1.7 Interchangeability.** Emergency power systems shall be an acceptable alternative for installations that require standby power systems.

**1203.1.8 Group I-2 occupancies.** In Group I-2 occupancies located in flood hazard areas established in Section 1612.3 of the *California Building Code* where new essential electrical systems are installed, and where new essential electrical system generators are installed, the systems and generators shall be located and installed in accordance with ASCE 24. Where connections for hook up of temporary generators are provided, the connections shall be located at or above the elevation required in ASCE 24.

**1203.1.9 Maintenance.** Existing installations shall be maintained in accordance with the original approval and Section 1203.4.

**1203.2 Where required.** Emergency and standby power systems shall be provided where required by Sections 1203.2.1 through 1203.2.19.

**1203.2.1 Ambulatory care facilities.** Essential electrical systems for ambulatory care facilities shall be in accordance with Section 422.6 of the *California Building Code*.

**1203.2.2 Elevators and platform lifts.** Standby power shall be provided for elevators and platform lifts as required in Sections 604.3, 1009.4.1 and 1009.5.

**1203.2.3 Emergency responder communication coverage systems.** Standby power shall be provided for in-building, two-way emergency responder communication coverage systems as required in Section 510.4.2.3. The standby power supply shall be capable of operating the in-building, two-way emergency responder communication coverage system at 100-percent system operation capacity for a duration of not less than 12 hours.

**1203.2.4 Emergency voice/alarm communication systems.** Standby power shall be provided for emergency voice/alarm communication systems in accordance with NFPA 72.

**1203.2.5 Exhaust ventilation.** Standby power shall be provided for mechanical exhaust ventilation systems as required in Section 1207.6.1.2.1. The system shall be capable of powering the required load for a duration of not less than 2 hours.

**1203.2.6 Exit signs.** Emergency power shall be provided for exit signs as required in Section 1013.6.3. The system shall be capable of powering the required load for a duration of not less than 90 minutes.

**1203.2.7 Gas detection systems.** Emergency power shall be provided for gas detection systems where required by Sections 1203.2.10 and 1203.2.17. Standby power shall be provided for gas detection systems where required by Sections 916.5 and 1207.6.1.2.4.

**1203.2.8 Group I-2 occupancies.** Essential electrical systems for Group I-2 occupancies shall be in accordance with Section 407.11 of the *California Building Code*.



(3) Halogenated agent systems

(4) Liquid agent systems

(5) Clean agent systems

PRIVATE GARAGE.

RECORD DRAWINGS.

SINGLE-STATION SMOKE ALARM.

SLEEPING UNIT.

SMOKE ALARM.

SMOKE DETECTOR.

STANDPIPE, TYPES OF.

Automatic dry.

Automatic wet.

Manual dry.

Manual wet.

Semiautomatic dry.

STANDPIPE SYSTEM, CLASSES OF.

Class I system.

Class II system.

Class III system.

SUPERVISING STATION.

SUPERVISORY SERVICE.

SUPERVISORY SIGNAL.

SUPERVISORY SIGNAL-INITIATING DEVICE.

**[California Code of Regulations, Title 19, Division 1, §902.18(a)] “S” Definitions.**

(a) Service. The performance of testing and maintenance on an automatic fire extinguishing system.

TIRES, BULK STORAGE OF.

TRANSIENT AIRCRAFT.

TROUBLE SIGNAL.

VISIBLE ALARM NOTIFICATION APPLIANCE.

WET-CHEMICAL EXTINGUISHING AGENT.

WIRELESS PROTECTION SYSTEM.

ZONE.

ZONE, NOTIFICATION.

This section is modified per the District findings.  
Note: this section has not changed from previous  
fire code adoptions.

## SECTION 903—AUTOMATIC SPRINKLER SYSTEMS

**903.1 General.** Automatic sprinkler systems shall comply with this section.

**903.1.1 Alternative protection.** Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted instead of automatic sprinkler system protection where recognized by the applicable standard and approved by the fire code official.

**903.2 Where required.** Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12 and Sections 903.2.14 through 903.2.21.

**Exception:** Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries not required to have an automatic sprinkler system by Section 1207 for energy storage systems and standby engines, provided that those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the *California Building Code* or not less than 2-hour horizontal assemblies constructed in accordance with Section 711 of the *California Building Code*, or both.

**903.2.1 Group A.** An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A occupancies as provided in this section.

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

1. The fire area exceeds 12,000 square feet (1115 m<sup>2</sup>).

2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area contains a multiple-theater complex.

**903.2.1.2 Group A-2.** An automatic sprinkler system shall be provided throughout stories containing Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464 m<sup>2</sup>).
2. The fire area has an occupant load of 100 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. *The structure exceeds 5,000 square feet (465 m<sup>2</sup>), contains more than one fire area containing a Group A-2 occupancy, and is separated into two or more buildings by fire walls of not less than 4-hour fire-resistance rating without openings.*

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

1. The fire area exceeds 12,000 square feet (1115 m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. *The structure exceeds 12,000 square feet (1155 m<sup>2</sup>), contains more than one fire area containing exhibition and display rooms, and is separated into two or more buildings by fire walls of not less than 4-hour fire-resistance rating without openings.*

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

1. The fire area exceeds 12,000 square feet (1115 m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

**903.2.1.5 Group A-5.** An automatic sprinkler system shall be provided for all enclosed Group A-5 accessory use areas in excess of 1,000 square feet (93 m<sup>2</sup>).

**903.2.1.5.1 Spaces under grandstands or bleachers.** Enclosed spaces under grandstands or bleachers shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1 where either of the following exist:

1. The enclosed area is 1,000 square feet (93 m<sup>2</sup>) or less and is not constructed in accordance with Section 1030.1.1.1.
2. The enclosed area exceeds 1,000 square feet (93 m<sup>2</sup>).

**903.2.1.6 Assembly occupancies on roofs.** Where an occupied roof has an assembly occupancy with an occupant load exceeding 100 for Group A-2 and 300 for other Group A occupancies, all floors between the occupied roof and the level of exit discharge shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

**Exception:** Open parking garages of Type I or Type II construction.

**903.2.1.7 Multiple fire areas.** An automatic sprinkler system shall be provided where multiple fire areas of Group A-1, A-2, A-3 or A-4 occupancies share exit or exit access components and the combined occupant load of these fire areas is 300 or more.

**903.2.2 Group B.** An automatic sprinkler system shall be provided for Group B occupancies as required in Sections 903.2.2.1 and 903.2.2.2.

**903.2.2.1 Ambulatory care facilities.** An automatic sprinkler system shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self-preservation.
2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor as well as all floors below where such care is provided, and all floors between the level of ambulatory care and the nearest level of exit discharge, the level of exit discharge, and all floors below the level of exit discharge.

**Exception:** Floors classified as an open parking garage are not required to be sprinklered.

**903.2.2.2 Laboratories involving research and development or testing.** An automatic sprinkler system shall be installed throughout the fire areas utilized for the research and development or testing of lithium-ion or lithium metal batteries.

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

1. Throughout all Group E fire areas greater than 12,000 square feet (1115 m<sup>2</sup>) in area.
2. The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies.

than \$2000.00 per day, plus the actual costs of all inspections required to gain compliance at the rate set from time to time by the Little Lake Fire Protection District. This civil penalty shall be a debt owed to the District by the person responsible for the violation within thirty (30) days after the date of mailing of the citation unless an appeal is filed as provided for in Section 112.5.

**Section 503 Fire Apparatus Access Roads** in its entirety.

Section 503.4.2, Roadway Design Features, of Chapter 5 is hereby added to read as follows:

**Section 503.3 Marking** of Chapter 5 is hereby added to read as follows:

**Section 503.3 Marking** Where the fire code official determines that it is necessary to ensure adequate fire access, the fire code official may designate existing roadways as fire access roadways as provided by Vehicle Code section 22500.1 (public) or 22658(a) (private).

**Section 505.1 Address Identification** of Chapter 5 is hereby amended to read as follows:

**Section 505.1 Address Identification.** Approved numbers and/or addresses shall be placed and maintained on all new and existing buildings and at appropriate additional locations so as to be plainly visible and legible from the street or roadway fronting the property from either direction of approach. Said numbers shall contrast with their background and shall meet the minimum standards as to size: 4" high with a 0.5" stroke for residential buildings, 6" high with a 0.5" stroke for commercial and multi-residential buildings, and 12" high with a 1" stroke for industrial buildings. Additional numbers shall be required where deemed necessary by the fire code official, such as rear access doors, building corners, and entrances to commercial centers. The fire code official may establish different minimum sizes for numbers for various categories of projects.

**Section 505.3 Easement Address Signs** of Chapter 5 is hereby added to read as follows:

**Section 505.3 Easement Address Signs.** All easements, which are not named differently from the roadway from which they originate, shall have an address sign installed and maintained, listing all street numbers occurring on that easement, located where the easement intersects the named roadway. The minimum size of numbers on that sign shall be 4" in height with a minimum stroke of 0.5" and shall contrast with the background.

**Section 505.4 Map Directories** of Chapter 5 is hereby added to read as follows:

**Section 505.4 Map Directories.** A lighted directory map, meeting current Fire District standards, shall be installed at each driveway entrance to multiple unit residential projects and mobile home parks, where the numbers of units in such projects exceed 15.

**Section 505.5 Response Map Updates** of Chapter 5 is hereby added to read as follows:

**Section 505.5 Response Map Updates.** Any new development, which necessitates updating of emergency response maps by virtue of new structures, hydrants, roadways, or similar features, shall be required to provide map updates in a format (PDF and/or CAD format as approved by the fire code official) or compatible with current District mapping services and shall be charged a reasonable fee for updating all response maps.

**Section 506.1 Key box where required.** Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life saving or firefighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type listed in accordance with UL1037, and shall contain keys to gain necessary access as required by the fire code official.

**Section 506.1.1 Locks.** An approved lock shall be installed on gates or similar barriers where required by the fire code official.

**Section 506.2 Key Box Maintenance.** The operator of the building shall immediately notify the fire code official and provide a new key where a lock is changed or rekeyed. The key to such lock shall be secured in the key box.

**Section 506.3 Emergency Electrical Disconnects** of Chapter 5 is hereby added as follows:

**Section 506.3 Emergency Electrical Disconnects.** Where access to main electrical control panels requires entry to, and passage through, portions of a structure that may be involved with fire, smoke, gasses, hazardous materials, or which otherwise present unsafe conditions to emergency personnel, the fire code official may require that a means of remotely disconnecting electrical service to the structure be provided. This means of remotely disconnecting electrical service shall be by a secured key switch mechanism approved by the Fire District.

**Section 1201.4 Alternate Power Sources** of Chapter 12 is hereby added to read as follows:

**Section 1201.4 Alternate Power Sources.** All permanent installations of electrical generators, wind generators, or other power sources shall be approved by the building code official. All applicable provisions of the California Electrical Code, the California Plumbing Code, the California Building Code, California Residential Code, and this Code shall be followed for any such installation. Permanent engraved and affixed signage, red in color, reading "WARNING – This premise is provided with an Alternate Power source, Disconnection of commercial power may not disable the electric power source". Lettering shall be a minimum of ½" tall and shall be permanently affixed on each electrical panel subject to back-feed from alternate power sources. Any and all power disabling switches shall be clearly labeled.

**Section 903.2 Where required** of Chapter 9 is hereby amended to read as herein provided. This Section shall not amend the portion commencing and following Section 903.2.1

**Section 903.2 Where required.** Approved automatic sprinkler systems in new, additions to existing, remodeled, added to or altered buildings and structures shall be provided in the locations described in this section.

- A. An automatic fire-extinguishing system shall be installed throughout all new buildings three (3) or more stories in height, or more than thirty (30) feet in height, and in all new buildings with a total floor area of more than five thousand (5,000) square feet regardless of occupancy or construction type.
- B. **Additions;** For additions to any existing building that result in the building's total floor area equaling or exceeding 5000 square feet in total floor area, or for additions to any building over 5000 square feet of total floor area, such buildings shall meet the requirements for a new building.  
Exception; One time additions, when required by the District for the purpose of conforming to state and local requirements, may be allowed if such additions do not exceed 250 square feet total floor area.
- C. **Alterations or Repairs;** For alterations or repairs to an existing building with 5000 square feet or more in total floor area that, within a 24-month period, exceeds 25% of the assessed valuation of the building, (excluding land value) such building shall meet the sprinkler requirements for a new building.
- D. **Design Criteria;** Whenever fire sprinkler systems are installed in buildings of undetermined use, they shall be designed and installed to have a sprinkler density that will accommodate Ordinary Hazard Group 2 with a minimum design area of 3000 square feet. Where a subsequent occupancy requires a system with greater capability, it shall be the building owner's responsibility to upgrade the system to the required density to meet any additional requirements of NFPA Standards.

MODIFIED  
PER FINDINGS  
SAME AS 2022.

### **Part 3. RESERVED**

**Part 4.** Upon its effective date, this Ordinance shall supersede any and all previous ordinances adopting earlier versions of the California Fire Code, and all other ordinances or parts of ordinances in conflict herewith are hereby repealed.

**Part 5.** That if any part, subpart, 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 Board of Directors of the Little Lake Fire Protection District hereby declares that it would have passed this Ordinance, and each part, subpart, clause, or phrase thereof, irrespective of the fact that any one or more parts, subparts, sentences, clauses, and phrases be declared unconstitutional.

**Part 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