

**FINDINGS FOR LOCAL MODIFICATIONS TO THE 2016 EDITIONS OF THE  
CALIFORNIA FIRE CODE, AS SET FORTH IN THE  
2016 CALIFORNIA BUILDING STANDARDS CODE**

**A. General Findings.** The San Leandro City Council makes the following general findings regarding local climatic, geologic, and topographical conditions, which the City finds necessitates the local modifications to the California Building Standards Code set forth below:

1. Local climatic conditions include a low amount of average yearly rainfall, which tends to be concentrated from October through April. From May through September, a dry period occurs where daily temperatures remain high and there is little measurable precipitation. In addition, the local climate frequently includes high winds which sweep down through the valley. High summer temperatures, average load demand and peak load demand of energy used in the City are important factors impacting public safety and creating the potential for adverse economic impacts due to power outages or power reductions (i.e. "brownouts"). As a result of the low precipitation, the area is subject to occasional drought.

In all areas of the City, fires can occur in buildings, rubbish, automobiles, and grass fires on vacant lots. In the high fire severity zone of the City, there is a risk of large brush and grass fires. If a fire occurs in high winds, it creates the risk of a potential fire storm.

In addition, development is occurring in previously undeveloped areas. This new development increases the chance of fire while simultaneously being located further from fire stations, delaying critical response times. This potential problem can be mitigated by requiring initial fire control through the installation of automatic fire protection systems.

2. Local geographical conditions include a risk of earthquake. A number of earthquake faults are located either within or in close proximity to the City's boundaries. Those with the most direct and potentially destructive impact are the San Andreas, Calaveras, and Hayward. History of earthquake activity indicates that there is a likelihood of a major earthquake in the area. The largest recorded earthquake in this immediate area occurred on the San Andreas Fault on October 17, 1989, a 7.1 magnitude. The U.S. Geological Survey (USGS) has identified a 63% probability of a major earthquake occurring in the region within the next 30 years. Recent earthquake damage studies, including the 1994 Northridge earthquake, have indicated the lack of adequate design and detailing as a contributing factor to damages that reduced the protection of the life-safety of building occupants.

In the event of an earthquake, damage to structures can be expected. In residential and commercial areas, this could include significant damage or collapse of buildings. Secondary impacts could include ruptured electric or gas connections and/or breaks in water distribution lines. The potential for a major seismic event would create a City-wide demand for emergency response and fire protection services that would exceed staff response capacity. This potential problem can be mitigated by requiring initial fire control through the installation of automatic fire protection systems.

3. Local topographical conditions include hills in the eastern portion of the City. Interstate highways 580 and 880 divide the City into thirds in the east and west direction. In addition, local traffic must also pass over railroad tracks, creeks, and bridges (to cross arroyos).

During peak a.m. and p.m. traffic periods, the City experiences heavy traffic congestion at key intersections, and near many freeway on-ramp and off-ramps. In the event of an accident or emergency at one of these key intersections, bridges, or other circulation corridors, sections of the City could become isolated and response times increased beyond ideal levels. Again, this potential problem can be mitigated by requiring initial fire control through the installation of automatic fire protection systems.

4. Based on the local climatic, geographical, and topographical conditions outlined above, there is a real risk that emergency response could be significantly delayed in the event of an accident or emergency. Therefore, it is necessary to address this problem through the requirement of additional mitigation measures to: (i) prevent the chance of accident or injury by requiring standards more stringent than required by the current codes; and (ii) requiring additional built-in automatic fire protection systems, which will provide for early detection and initial fire control.

**B. Specific Findings:** The San Leandro City Council make the following specific findings, which, in addition to the general findings regarding local climatic, geologic, and topographical conditions set forth above, the City finds necessitate the local modifications to the California Building Standards Code set forth below:

#### **1. California Fire Code.**

**7-8-105** Sections 903.2.1.1, 903.2.1.2, 903.2.1.3, 903.2.1.4, 903.2.3, 903.2.4, 903.2.7, 903.2.9, 903.2.10, 903.6, 5503.2.4.2, 5704.2.9.6.1, 5706.2.4.4, 5806.2, 6104.2 are amended.

##### **903.2.1.1 Group A-1 Occupancies.**

An automatic sprinkler system shall be provided for fire areas containing Group A-1 occupancies and intervening floors of the building where one of the following conditions exists:

1. The fire area exceeds 7,500 square feet (697 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 multi-theater complex.
5. When the overall height of the building exceeds 45 feet.

##### **903.2.1.2 Group A-2 Occupancies.**

An automatic sprinkler system shall be provided for fire areas containing Group A-2 occupancies and intervening floors of the building where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (465 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 less than 4-hour fire-resistance rating without openings.
5. When the overall height of the building exceeds 45 feet.

#### **903.2.1.3 Group A-3 Occupancies.**

An automatic sprinkler system shall be provided for fire areas containing Group A-3 occupancies and intervening floors of the building where one of the following conditions exists:

1. The fire area exceeds 7,500 square feet (697 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 7,500 square feet (697 m<sup>2</sup>), which contains more than one fire area containing exhibition and display rooms, and is separated into two or more buildings by fire walls of less than 4-hour fire resistance rating without openings.

#### **903.2.1.4 Group A-4 Occupancies.**

An automatic sprinkler system shall be provided for fire areas containing Group A-4 occupancies and intervening floors of the building where one of the following exists:

1. Where the floor area exceeds 7,500 square feet (697 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. When the overall height of the building exceeds 45 feet.

#### **903.2.3 Group E Occupancies.**

1. Throughout all Group E occupancies fire areas greater than 7,500 square feet (697 m<sup>2</sup>) in area.
2. Throughout every portion of educational buildings below the lowest level of exit discharge serving that portion of the building.  
**Exception:** An automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area where every classroom throughout the building has not fewer than one exterior exit door at ground level.
3. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in quantities not exceeding the maximum allowable quantity are used or stored.

4. Throughout any Group E structure greater than 7,500 square feet (697 m<sup>2</sup>) in area, which contains more than one fire area, and which is separated into two or more buildings by fire walls of less than 4-hour fire-resistance rating without openings.
5. When the overall height of the building exceeds 45 feet.
6. For public school state-funded construction projects see Section 903.2.19.

#### **903.2.4 Group F-1 Occupancies.**

An automatic sprinkler system shall be provided in all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. A Group F-1 fire area exceeds 7,500 square feet (697 m<sup>2</sup>).
2. A Group F-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 7,500 square feet (697 m<sup>2</sup>).
4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m<sup>2</sup>).
5. When the overall height of the building exceeds 45 feet.

**Section 903.2.4.1 remains.**

#### **903.2.7 Group M Occupancies.**

1. An automatic sprinkler system shall be installed in Group M occupancies where the floor area exceeds 7,500 square feet (697 m<sup>2</sup>).
2. A Group M fire area is located more than three stories above the grade plan.
3. A combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 7,500 square feet (697 m<sup>2</sup>).
4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (465 m<sup>2</sup>).
5. [SFM] *The structure exceeds 7,500 square feet (697 m<sup>2</sup>), contains more than one fire area containing a Group M occupancy, and is separated into two or more buildings by fire walls of less than 4-hour fire-resistance rating without openings.*
6. When the overall height of the building exceeds 45 feet.

**Section 903.2.7.1 remains.**

#### **903.2.9 Group S-1 Occupancies.**

An automatic sprinkler system shall be provided throughout all buildings containing Group S-1 occupancies where one of the following conditions exists.

1. A Group S-1 fire area exceeds 7,500 square feet (697 m<sup>2</sup>).
2. A Group S-1 fire area is located more than three stories above grade plane.
3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 7,500 square feet (697 m<sup>2</sup>).
4. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet (465 m<sup>2</sup>).
5. A Group S-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m<sup>2</sup>).
6. When the overall height of the building exceeds 45 feet.

**Section 903.2.9.1 and 903.2.9.2 remains.**

**903.2.10 Group S-2 Occupancies.**

An automatic sprinkler system shall be provided throughout all buildings classified as enclosed parking garages in accordance with Section 406.6 of the California Building Code where either of the following conditions exists:

1. Where the fire area of the enclosed parking garage exceeds 7,500 square feet (697 m<sup>2</sup>).
2. Where the enclosed parking garage is located beneath other groups.
3. When the overall height exceeds 45 feet.

**Sections 903.2.10.1 is remains.**

**903.2.13 Group B Occupancies.**

An automatic sprinkler system shall be installed in Group B occupancies where the floor area exceeds 7,500 square feet (697 m<sup>2</sup>).

**903.2.20 Group U Occupancies**

An automatic sprinkler system shall be provided for Group U occupancies where the fire area exceeds 7,500 square feet (697 m<sup>2</sup>).

**903.6 Where required in existing buildings and structures**

The provisions of this section are in addition to those requirements set forth in Chapter 11. Fire sprinklers shall be installed in existing commercial occupancy buildings when any of the following exist:

1. Permits for additions and alterations increase the floor area by 25 percent.
2. Whenever an addition is made to an existing building causing the total square footage of the building to exceed 7,500 square feet (465 m<sup>2</sup>). The entire building shall be equipped with sprinklers.
3. When a change in occupancy or use to a more hazardous occupancy type occurs. The structure will be required to meet the requirements as set forth for new construction for the new occupancy classification.

In residential occupancies, fire sprinklers shall be installed when there is an addition that results in the square footage exceeding 3,600 square feet (334 m<sup>2</sup>) including any attached U occupancies or garages.

**FINDING: The amendment is needed due to local climatic and topographical conditions.**

**These modifications are necessary because the City has a dry period of at least five months each year. Additionally, The area is subject to occasional drought. Because of dryness, a rapidly burning grass fire or exterior building fire can quickly transfer to other buildings.**

## **Section 5003.2.4.2 Hazardous Materials General Provisions**

Notwithstanding the foregoing, above-ground stationary tanks used for the storage of flammable or combustible liquids is prohibited in any area zoned for other than commercial, industrial, or agricultural use.

### **Section 5703.2.4.2.1 Remains**

**FINDING:** **This modification is necessary to adopt the most current State standard and to clarify specific areas of the code.**

### **Section 5704.2.9.6.1 Locations where above-ground tanks are prohibited:**

Storage is prohibited in areas designated as residential within the San Leandro city limits.

**FINDING:** **This modification is necessary to adopt the most current State standard and to clarify specific areas of the code and permitted locations of above ground tanks.**

### **Section 5706.2.4.4 Locations where above-ground tanks are prohibited**

Storage is prohibited in areas designated as residential within the San Leandro city limits.

**FINDING:** **This modification is necessary to adopt the most current State standard and to clarify specific areas of the code and permitted locations of above ground tanks.**

### **Section 5806.2 Limitations**

Storage is prohibited in areas designated as residential within the San Leandro city limits.

**FINDING:** **This modification is necessary to adopt the most current State standard and to clarify specific areas of the code and permitted locations of above ground tanks.**

### **Section 6104.2 Maximum capacity within established limits**

Storage is prohibited in areas designated as residential within the San Leandro city limits.

**FINDING:** **This modification is necessary to adopt the most current State standard and to clarify specific areas of the code and permitted locations of above ground tanks.**