



## PROCEDURES FOR FIRE SAFETY DURING CONSTRUCTION OR ALTERATION OF A BUILDING

**Effective Date: Jan 1, 2023**

### 1.0 **SCOPE**

Buildings undergoing construction or alteration shall be in accordance with CFC Chapter 33 and the directives herein.

### 2.0 **PERMITS**

Permits are required for all construction or alterations of a building.

### 3.0 **APPROVALS**

Approval of the safety precautions required for buildings being constructed or altered is required by the Authority Having Jurisdiction (AHJ) in addition to any other approvals required for specific operations or processes associated with such work.

*Exception: Buildings designated as Group R, Division 3 or Group U do not require approval of safety precautions.*

### 4.0 **FIRE SAFETY** Fire protection, including fire apparatus access roads and water supplies for fire protection, is required to be installed and made serviceable prior to and during the time of construction.

*Exception: When alternate methods of protection, as approved, are provided, these requirements may be modified or waived.*

### 4.1 **OWNERS RESPONSIBILITY FOR FIRE PROTECTION:** The owner and owner's authorized agent shall be responsible of the development and implantation and maintenance of an approved, written site safety plan establishing a fire prevention program at the project site applicable throughout all the phases of the construction, repair, alteration or demolition work. As adopted by current CFC.

### 4.2 **FIRE PROTECTION PLAN:** A fire-protection plan shall be established. As part of the building plan check submittal, plans and procedures shall be submitted for review and approval prior to construction. Following approval, a copy of the approved plans shall be maintained on the premises in an approved location per CFC section 3303.1. The plans shall include requirements from CFC section 3301 and the following:

4.2.1 Plans for fire apparatus access.

4.2.2 Plans and specifications for fire hydrants.  
(See Section 4.5)

4.2.3 Plans for marking of fire apparatus access roads, addresses and fire-protection equipment.

4.2.4 Site storage plans, interior, and exterior. (See Section 4.8, 4.9 and 4.10)

4.2.5 Location of valves controlling the water supply.

4.2.6 Location of fire walls and control areas.

*Note: Additional information regarding required design features, commodities, storage arrangement and fire-protection features shall be provided at the time of permit, when required by the SJFD.*

### 4.3 **EVACUATION PLAN:** An evacuation plan and a separate set of plans indicating location and width of aisles; location of exits, exit-access doors, and exit signs; height of storage; and locations of hazardous materials shall be submitted at the time of the application for review and approval. Following approval of the plans, a copy of the approved plans shall be maintained on the premises in an approved location.

- 4.4**      **ACCESS ROADS:** Fire department access roads shall be established and maintained in accordance with CFC section 503.
- 4.4.1    **Gas Meters and Piping.** Aboveground gas meters, regulators, and piping exposed to vehicular damage due to proximity to alleys, driveways, or parking areas shall be protected in an approved manner.
- 4.5**      **WATER SUPPLY:** Water mains and hydrants shall be installed and operational in accordance with Water Supply CFC section 3313.
- 4.5.1    **Protection, Marking and Obstruction of Hydrants.** Fire hydrants subject to possible vehicular damage shall be adequately protected, marked, and kept unobstructed in accordance with Vehicle Impact Protection CFC section 312
- 4.5.2    **Marking.** Fire- protection equipment and fire hydrants shall be clearly identified in an approved manner to prevent obstruction by parking and other obstructions. Hydrant locations shall be identified by the installation of reflective markers.
- 4.5.3    **Obstruction and Impairment of Fire Hydrants and Fire-protection Equipment.** Posts, fences, vehicles, growth, trash, storage, and other items shall not be placed or kept near fire hydrants, fire department inlet connections, or fire-protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire-protection equipment or hydrants.
- 4.5.4    Clear Space around Hydrants shall be provided in accordance with CFC section 507.5.5.  
*Exception: When approved, a temporary water supply for fire protection is allowed to be used until permanent fire-protection systems are installed.*
- 4.6**      **FIRE PROTECTION:** During the project, fire protection shall be provided and /or through Standpipes, Automatic Sprinkler Systems, Fire Protection Devices, Fire Extinguishers, Fire Watch, Emergency telephones and Fire Resistive assemblies and construction.
- 4.6.1    Construction Standpipe shall be provided in accordance with CFC section 3314.
- 4.6.2    Automatic Sprinkler System shall be provided in accordance with CFC section 3315.
- 4.6.3    Fire Protection Devices The fire prevention program superintendent shall determine that all fire protection equipment is maintained and serviced in accordance with this code. Fire alarm equipment may not be taken out of service without an approved fire-protection plan.
- 4.6.4    Fire extinguishers shall be provided in accordance with CFC section 3316.
- 4.6.5    Fire Watch shall be provided during construction that is hazardous in nature, qualified personnel shall be provided to serve as an on-site fire watch. The sole duty of fire-watch personnel shall be to watch for the occurrence of fire in accordance with CFC section 3305.5.
- 4.6.6    Telephone facilities shall be provided at the construction site for the purpose of emergency notification of the fire department. The street address of the construction site shall be posted adjacent to the telephone together with the fire department telephone number. The requirements shall be per CFC section 3310.
- 4.6.7    During alteration, fire-resistive assemblies and construction shall be maintained if not part of the demolition. Permits are required through the Building Department to repair, replace or restore required fire-resistive construction.
- 4.7**      **BUILDING ACCESS:** Access for the purpose of firefighting shall be provided in accordance with the directives herein. Construction material shall not block access to hydrants, fire appliances, or to and through buildings.
- 4.7.1    Premises Identification shall be provided in accordance with CFC section 505
- 4.7.2    Streets and roads shall be identified with approved signs.
- 4.7.3    Required Access shall be provided in accordance with CFC section 3206.6
- 4.7.4    Shaftway Marking shall be provided in accordance with CFC section 316.2

- 4.7.5 Floor openings shall be surrounded by guardrails or shall have covers which are automatic closing or maintained in a closed position at all times.
- 4.7.6 Aisles shall be maintained in accordance with CFC section 3206.10
- 4.7.7 Required means of egress components shall be provided and maintained in accordance to CFC section 3312 **Exception:** *Temporary means of egress system or facilities may be proposed for approval with the Fire Protection Plan.* Fire Department Hose Connections shall be provided in accordance with CFC section 3206.9

**4.8 COMBUSTIBLE MATERIALS:** Storage, accumulation, use and handling of combustible materials shall be in accordance with CFC section 3306 and CFC section 304

- 4.8.1 Combustible rubbish and waste material kept within or near a structure shall be stored in accordance with CFC Sections 304.3.1 through 304.3.4.
- 4.8.2 Pallet Storage shall be provided in accordance with CFC section 315.7

**4.9 EXTERIOR STORAGE:** Exterior storage, accumulation, use and handling of combustible materials shall be in accordance with CFC section 315.4

- 4.9.1 Storage of combustible materials around buildings shall be orderly. Storage areas, and portions of storage areas intended for storage of a different commodity class than adjacent areas, shall be designed and specifically designated to contain Class I, Class II, Class III, Class IV or high-hazard commodities as defined by CFC chapter 32. The designation of a combustible storage area, or portion thereof intended for storage of a different commodity class, shall be based on the highest hazard commodity class stored. Any commodities that may be hazardous in combination with each other shall be stored so they cannot come into contact with each other.

**Designation.** *The designation of a combustible storage area, or portion thereof, shall indicate the maximum storage height of the pile (or racks) and the contiguous area occupied. A storage array shall not exceed 12 feet in height and 2,500 square feet in un-separated area and additional areas shall be separated from other such areas by 25 feet or more.*

**Note:** *Higher hazard areas may be further limited in size and separation at the discretion of the fire code official. Hazardous materials will be subject to the requirements of the SJFD Hazardous Material Division.*

**4.10 INTERIOR STORAGE:** Interior storage, accumulation, use, and handling of combustible materials shall be in accordance with CFC section 315.3

- 4.10.1 Storage of combustible materials in buildings shall be orderly. Storage areas, and portions of storage areas intended for storage of a different commodity class than adjacent areas, shall be designed and specifically designated to contain Class I, Class II, Class III, Class IV or high-hazard commodities as defined by CFC Chapter 32. The designation of a combustible storage area, or portion thereof intended for storage of a different commodity class, shall be based on the highest hazard commodity class stored. Any commodities that may be hazardous in combination with each other shall be stored so they cannot come into contact with each other.

**Designation.** *The designation of a combustible storage area, or portion thereof, shall indicate the maximum storage height of the pile (or racks) and the contiguous area occupied. A storage array shall not exceed 12 feet in height and 500 square feet in un-separated area and additional areas shall be separated from other such areas by 25 feet or more.*

**Note:** *Higher hazard areas may be further limited in size and separation at the discretion of SJFD. Hazardous materials will be subject to the requirements of the SJFD Hazardous Materials Division.*

- 4.10.2 Fueled equipment. Storage shall be in accordance with CFC section 315.3  
**Note.** *The SJFD is authorized to require removal of such equipment from any location when the presence of such equipment is determined to be hazardous.*
- 4.10.3 Flammable Liquids storage, use, and handling of flammable liquids shall be in accordance  
Storage shall be in accordance with CFC section 3306
- 4.10.4 Unauthorized Discharges shall be in accordance with CFC section 5003.3.
- 4.10.5 In the event of a spill, leak, or discharge from a tank system shall be in accordance with CFC section 5706.2

- 4.10.6 Waste liquids shall be kept in a sump, tank, or receptacle approved for this purpose.
- 4.10.7 Spill Control and Secondary Containment shall be in accordance with CFC section 5703.4
- 4.10.8 Storage and Dispensing of Flammable and Combustible Liquids on Construction Sites shall be in accordance with CFC section 5706.2.
- 4.10.9 Dispensing from Tank Vehicles. When approved, liquids used as fuels may be transferred from tank vehicles into the tanks of motor vehicles or special equipment, shall be in accordance with CFC section 5706.6

**4.11 CONTROL OF SOURCES OF IGNITION:** shall be in accordance with CFC section 305

- 4.11.1 Temporary heating equipment shall be in accordance with CFC section 3304
- 4.11.2 Smoking shall be in accordance with CFC section 310
- 4.11.3 Cutting and welding operations shall be in accordance with the handout for “HOT WORK PROCEDURES”.
- 4.11.4 The use of torches or flame-producing devices shall be in accordance with the handout for “HOT WORK PROCEDURES”.
- 4.11.5 Open-flame Devices shall be in accordance with CFC section 308
- 4.11.6 Motor Equipment shall be in accordance with CFC section 3317
- 4.11.7 Temporary Electrical Wiring shall be in accordance with CFC section 603.8
- 4.11.8 Extension Cords and Flexible Cords shall be in accordance with CFC section 603.6  
Extension cords shall not be used as a substitute for permanent wiring.

**4.12 ASPHALT KETTLES:** shall be in accordance with CFC section 303.

**4.13 ASBESTOS REMOVAL:** Operations involving removal of asbestos or asbestos-containing materials from buildings shall be in accordance with the directives herein.

*Exception: This does not apply to the removal of asbestos from:*

1. Pumps, valves, gaskets, and similar equipment.
2. Pipes, ducts, girders, or beams, which have a length less than 21 linear feet.
3. Wall or ceiling panels which have an area of less than 10 square feet or a dimension of less than 10 linear feet.
4. Floor tiles when the duration of work can be completed in less than four hours.

**4.13.1 Permits.** Permits are required to conduct asbestos-removal.

**4.13.2 Approvals.** Approval of the safety precautions required for operations involving removal of asbestos or asbestos-containing materials from buildings being altered is required in addition to any other approvals for specific operations or processes associated with such alteration.  
**Notification.** *The AHJ shall be notified 24 hours prior to the commencement and closure of asbestos-removal operations. The permit applicant shall notify the AHJ when asbestos abatement involves the removal of materials which were used as a feature of the building's fire resistance.*

**4.13.3 Plastic Film.** Plastic film, which is installed on building elements, shall be flame resistant.

**4.13.4 Signs.** Approved signs shall be posted at the entrance, exits, exit-access door, decontamination areas, and waste-disposal areas for asbestos-removal operations. The signs shall state that asbestos is being removed from the area. Indicate that asbestos is a suspected carcinogen and that proper respiratory protection is required. Signs shall have a reflective surface and lettering shall be a minimum of 2 inches high.

**5.0 DOCUMENT REVISIONS.**

**5.1** This document is subject to revisions. For general information and to verify that you have the most current document, see SJFD development website or call (408) 535-7750, and request the current version date.