

# Fire Prevention Bureau

# Standard Detail & Specification Manual

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Title: Requirements for Final-Commercial Revised: May 7, 2019

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### **Automatic Fire Sprinklers:**

All areas shall be equipped with fire sprinklers, meeting the requirements of NFPA 13 (2013 edition). The plans for this system must be submitted to the City of Half Moon Bay or the San Mateo County Planning and Building Division. Upon submission of said plans, the City/County will forward a complete set to the Coastside Fire Protection District for review. The fee schedule for Automatic Sprinkler Systems shall be in accordance with Half Moon Bay Ordinance No. 2013-03. Fees shall be paid prior to plan review.

# **Underground Fire Sprinklers Supply:**

Installation of underground sprinkler pipe shall be visually inspected for thrust block installation, pressure tested to 200 pounds for 2 hours and flushed prior to hook-up to riser. Plastic (C-900) pipe shall have a tracer wire installed.

#### **Fire Access Roads:**

Fire suppression operations involve heavy pieces of apparatus that must set-up and operate close to the building. State Fire Code and our ordinances require construction that allows fire apparatus to be placed directly outside the building. Additionally, it is the developer's responsibility to assure well-marked fire lanes are provided around the entire outside perimeter of the building.

When fire protection, including fire apparatus access roads and water supplies for fire protection, is required to be installed. Such protection shall be installed and made serviceable prior to and during the time of construction before combustibles are on the project site.

Approved signs and painted curbs or lines shall be provided and maintained to identify fire apparatus access roads and state the prohibition of their obstruction. Fire lanes shall be in accordance with Coastside Fire Protection District specifications. Contact the Fire Prevention Bureau for those specifications.



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Construct all fire apparatus access roads in accordance with California Fire Code Section 902. This form of access is required when any portion of a building is located more than 150 feet from vehicular access. The minimum unobstructed required width is 20 feet. Minimum required vertical clearance is 13 feet 6 inches. Gates securing access roads must provide a clear opening 20 feet in width. Dead-end access roads, which exceed 150 feet in length, shall be constructed with turnarounds so that fire apparatus can maneuver to reverse direction on the access road. Cul-desacs, tees, bulbs, and other configurations intended to satisfy this requirement must be approved by the Chief. Roads shall be constructed to support loads imposed by fire apparatus, shall provide an all weather driving surface and shall be certified by a Civil Engineer @ Final.

## **Emergency Building Access:**

"Knox Boxes" (Emergency Key Boxes) are required when access to or within a structure or an area is unduly difficult because of secured openings or where immediate access is necessary for life saving or fire-fighting purposes. The Chief will determine the location for the key box and provide an authorized order form.

All security gate systems controlling vehicular access shall be equipped with a "Knox", key operated emergency entry device. Applicant shall contact the Fire Prevention Bureau for specifications and approvals prior to installation.

#### **Address Numbers:**

Building identification shall be conspicuously posted and visible from the street. (TEMPORARY ADDRESS NUMBERS SHALL BE POSTED PRIOR TO COMBUSTIBLES BEING PLACED ON SITE). The letters and numerals for permanent address numbers shall be of 6-inch stroke and of a color which is contrasting with the background. Such letters or numerals shall be illuminated and facing the direction of access. Larger address numerals may be required when buildings are located farther from the roadway.

### **Roof Covering:**

The roof covering of every new building or structure, and materials applied as part of a roof covering assembly, shall have a minimum fire rating of Class "B" or higher.

### Fire Flow:

The California Fire Code Appendix B and BB have been utilized to determine the required fire flow and number of fire hydrants required. The fire flow in other than One-and-Two-family dwellings shall not be less than 1500 gallons per minute measured at 20 psi, larger and more complex structures will require larger volumes and the Fire Prevention Bureau should be consulted early in the project. Placement will be determined by the Fire Prevention Bureau.



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## **Fire Extinguishers:**

There must be a fire extinguisher for each 3,000 square feet, travel distance not to exceed 75'per Title 19 CCR.

### Commercial Cooking Areas:

Provide one Type"K" 40BC rated fire extinguisher for cooking area, installed within 30' of cooking equipment. Extinguisher to be tagged with the seal of the State Fire Marshal. An automatic fire suppression system meeting UL 300 standards shall be installed in the hood and duct system in all commercial kitchens.

#### **Exit Doors:**

Exit doors shall be of the pivoted type or side hinged swinging type. Exit doors shall swing in the direction of travel when serving an occupant load of 50 or more.

<u>Special Doors</u>: Revolving, sliding and overhead doors shall not be used as required exits. Power operated doors complying with CBC Standard No. 10-1 may be used for exit purposes.

<u>Additional Doors</u>: When additional doors are provided for egress purposes, they shall conform to all the provisions of CBC chapter 10.

#### **Exit Door Hardware:**

Exit door(s) shall be operable from the inside without the use of a key, special knowledge or effort.

Exception: Main exit door may be equipped with a keyed-locking device if there is a readily visible sign on or adjacent to the door stating "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS. The sign shall be in letters not less than 1 inch thick.

#### Panic Hardware:

In A, E and I occupancies, doors serving an area with an occupant load of 50 or more shall not be equipped with a lock or latch unless it is panic hardware. Panic hardware, when installed, shall comply with the requirements of CBC Std. No. 10-4.

#### **Delayed Egress:**

When approved by the Fire Marshal, may be equipped with approved listed special egress-control devices of the time-delay type, provided the building is protected throughout by an approved automatic sprinkler system and an approved automatic smoke detection system. Such devices shall conform to all of the conditions stated in CBC section 1008.1.9.7



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### **Exit Illumination:**

<u>Illumination</u>: Signs shall be internally or externally illuminated by two electric lamps or shall be of an approved self-luminous type.

<u>Power Supply</u>: Current supply to one of the lamps for exit signs shall be provided by the premises wiring system. Power to other lamp shall be from storage of batteries or an on-site generator set. Show exit illumination on plan.

### **Exit Signage:**

Where required: When 2 or more exits from a story are required by Section 1003, exit signs shall be installed at stair enclosures, horizontal exits and other required exits from the story. When 2 or more exits are required from a room or area, exit signs shall be installed at the required exits from the room or area and where otherwise necessary to clearly indicate the direction of egress. Exception: Main exit doors which obviously are clearly identifiable as exits (glass doors.) Show exit signs on plan.

When exit signs are required by Section 1011.1, additional approved low-level exit signs, which are internally or externally illuminated, photoluminescent or self-luminous, shall be provided in all interior rated exit corridors serving guest rooms of hotels in Group R, Division 1 Occupancies, and other occupancies as determined by the code.

### Occupancy Load Sign:

Any room having an occupant load of 50 or more where fixed seats are not installed, and which is used for classroom, assembly or similar purpose, shall have the capacity of the room posted in a conspicuous place.

#### **Corridor Construction:**

Walls of corridors serving an occupant load of 7 or more in C-1, and R-2 occupancies, 10 or more in E and R -1 occupancies and other occupancies with an occupancy load of 30 or more shall be of not less than one-hour fire resistive construction and the ceilings shall be not less than that required for a one-hour fire resistive floor or roof system. Exceptions as per CBC section 1005.7

# **High Piled Storage:**

Storage in closely packed piles shall not exceed 15 feet in height, 12 feet on pallets or in racks and 6 feet for tires, plastics and some packing materials and flammable liquids. If high piled stock piling is anticipated, submit a complete storage plan and description of the commodities to be stored. Show compliance with Chapter 23 of the California Fire Code.



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## Flammable Liquids:

Storage, dispensing or use of any flammable or combustible liquid shall comply with Chapter 24 of the 2013 California Fire Code.

### **Defensible Space:**

The Fire Department recommends that a defensible space of not less than 100 feet be maintained between the home and any combustible vegetation. Vegetation and or weeds which presents a fire hazard to structures shall be modified or removed in order to provide and maintain a defensible space. Defensible space requirements and specifications will be determined by the Coastside Fire Protection District.

In order to determine if the required defensible space could result in negative impacts to protected lands, determine the status of all vegetation before alteration.

#### **Internal Flow Alarm:**

An internal audible device (i.e.Horn Strobe) that will annunciate with the flow switch as well as the Flow Alarm bell is required.

## **Monitoring for Flow and Tamper:**

Commercial buildings with an N.F.P.A. #13 or N.F.P.A. #13R Automatic Sprinkler system with more than fifty sprinkler heads are required to be monitored for flow and tamper by Fire District Ordinance. Permits are required for the installation of all fire alarm systems. Plans must be approved by the Fire Department prior to installation.

Adherence to the conditions listed above shall not be held to permit violations of any other requirement identified by the Code.