



## FIRE PREVENTION GUIDELINE

| <b>Title: Identification of Fire Department Connections</b>  |                                   |                                 |
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| <b>Number:</b> FPG-02  | <b>Effective Date:</b> 01/01/2023 | <b>Revised Date:</b> 03/01/2023 |
| <b>Code References:</b> California Fire Code (CFC), National Fire Protection Association, California Code of Regulations (CCR) Title 19, Merced Municipal Code (MMC)   |                                   |                                 |
| <b>Note:</b> <i>This guideline is a summary of Fire Department clarifications and interpretations of City and State Codes and nationally recognized standards in accordance with the currently adopted edition of the Fire Code. Information contained herein applies to typical circumstances and may not address all situations.</i> |                                   |                                 |

### SCOPE

This guideline has been developed to assist development applicants, architects, contractors, and building/business owners in determining the minimum requirements for the installation, maintenance and identification requirements of Fire Department Connections supplying built-in fire protection systems.

### AUTHORITY

Sections 102.9 of the 2022 California Fire Code states the fire code official shall have the authority to adopt policies, procedures, rules, and regulations in order to clarify the application of the Fire Code and to determine requirements not specifically provided for by the Fire Code.

### DISCLAIMER

These standards may change without notice. Whenever applicable statutes, regulations and standards are updated and adopted, the latest shall apply. Please contact the City of Merced Fire Department to determine if these standards have changed. These requirements do not exempt any individual from complying with other applicable state, county, or city codes and standards.

### CODES AND GUIDELINES

This guideline shall apply to all buildings or structures, new or existing that require a Fire Department Connection (FDC) for a fire suppression system in accordance with the California Fire Code, National Fire Protection Association, California Code of Regulations, Title 19 and the Merced Municipal Code.



## PERMITS REQUIRED

A Fire Code permit is not required.

## SPECIFIC REQUIREMENTS

### LOCATION

The Fire Chief or his/her designee shall approve the location of Fire Department connections. In general,

- a. The fire department connection should be located at least 40 feet away from buildings or other potential exposures.
- b. The fire department connection shall be located no more than 100 feet from the nearest fire hydrant.
- c. The fire department connection shall be located no less than 18 inches and no more than 48 inches above the grade surface. NFPA
- d. Fire department connections shall be visible, accessible, and installed on the address side of buildings fully visible from the street or nearest point of fire department vehicle access or in locations approved by the fire code official. CFC 912.
- e. Fire department connections installed, as part of the back flow assembly shall be on the system side of the backflow device, and facing the fire apparatus access road subject to fire department approval.
- f. Fire department connections shall be within five (5) feet of the curb or back of walkways adjacent to a public street or approved fire access road.
- g. Visual obstructions or screens including walls, plants, and covers shall not obstruct access to the fire department connection, system control valves or fire hydrant(s). The Fire Department shall have final approval of visual screens with regards to fire department equipment.

### EXISTING BUILDINGS

On existing buildings wherever the fire department connection is not visible to approaching fire apparatus, an approved sign mounted on the street front or address side of the building shall indicate the fire department connection. Such sign shall have the letters "FDC" not less than 6 inches high and words in letters not less than 2 inches high or an arrow to indicate the location. All such signs shall be approved by the fire code official. CFC 912.



## ACCESS

Immediate access to fire department connections so that hose lines can be readily and conveniently attached to the inlets shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other object within a minimum of 3 feet.

## IDENTIFICATION

All Fire Department Connections shall be painted red. No paint shall be used around the swivel connections.

Wall Mounted or Pipe Mounted Fire Department Connections

1. A sign constructed of durable material, preferably metal, with a red reflective background, mounted directly on the building or directly to the FDC plumbing and adjacent to the fire department connection.

Protection system identification

1. Lettering for FDC shall be white in color, 6 inches high and with a 0.5 inch stroke.
  - a. Lettering for wet pipe sprinkler system "Sprinkler System" shall be white in color, 1 inches high and with a 0.125 inch stroke.



- b. Lettering for combination system "Sprinkler System & Standpipe" shall be white in color, 1 inch high and with a 0.125 inch stroke.



2. The protected building's address lettering shall be white in color, block numbers and letters 2 inches high and with a 0.25 inch stroke.
3. If the system protects a range of addresses the first and last numbers shall be utilized.



**CAPS**

Fire department connections shall be provided with approved caps to prevent tampering or plugging with debris.

**REFLECTIVE MARKERS**

One or more green reflective markers shall be installed on the roadway adjacent to the fire department connection.



Installation guidelines,

- a. Two-way streets and roads: Markers should be placed six inches from the edge of the painted centerline on the side nearest the FDC. If the street has no centerline, the marker should be placed six inches from the approximate center of the roadway.
- b. Streets with a left turn lane at the intersection: markers should be placed six inches from the edge of the painted white channelizing line on the side nearest the FDC.
- c. Streets with continuous two-way left turn lane: Markers should be placed six inches from the edge of the painted yellow barrier on the side nearest the FDC.
- d. Freeways and expressways: Because of higher maintenance at these locations if placed on the roadway, markers should be placed on the shoulder one foot to the right of the painted edge-line opposite the off-right of way FDC location. Approval from Cal-trans is required prior to installation of markers on any state highway or freeway.