



FIRE PREVENTION MANUAL
DEVELOPMENT REQUIREMENTS
403.002 FIRE DEPARTMENT ACCESS
EFFECTIVE: JUNE 2008

SCOPE

This policy clarifies the Fresno Fire Department's (FFD or Department) requirements for access to properties within the City of Fresno and contract service areas.

PURPOSE

This policy has been established to provide direction for the requirements for providing minimum fire department access.

BACKGROUND

The purpose of fire department apparatus access is to allow emergency vehicles to approach a building as close as practical in order to deploy fire hose, ladders, and other equipment necessary for rescue and fire suppression.

Fire department emergency vehicles are the longest, widest, tallest, and heaviest vehicles regularly driven on residential streets, private driveways, and alleys. The ability to manipulate and deploy fire department apparatus is greatly affected by the dimensions and reliability of the access available.

Access, as defined in this policy, includes private streets and driveways not otherwise defined under *City of Fresno Public Works (PW) Standards for Streets*.

DEFINITIONS

Types of Access

1. **Common Vehicle Access.** Common vehicle access describes private streets, driveways, and alleys which connect with a public street and are required for emergency access as well as for access by the public.
2. **Emergency Vehicle Access.** Where adequate common vehicle access to buildings is not provided by public streets or private driveways, emergency access shall be provided for the exclusive use of fire department vehicles.

3. Fire Hose Pull and Equipment Access. Fire hose pull and equipment access is an unobstructed walkway which provides continuous access connecting vehicular access to all building openings and exterior storage areas. The walkway requires unobstructed 36 inch horizontal clearance around openings and continuous seven (7) foot vertical clearance.
4. Aerial Fire Apparatus Access. Fire apparatus access located directly adjacent to multi-story buildings, positioned in such a way as to allow fire department aerial ladders to be raised to the lowest point of the roof eave (as defined in *California Building Code (CBC) 702A* – the word sloping is deleted) that meets the requirements in the *California Fire Code (CFC)*, Section 605.11.1.1 for roof access points.
5. Construction Access. Required fire apparatus access lanes shall be provided year round and maintained with an approved, all-weather surface, capable of supporting 80,000-pound vehicles (minimum of 4-inch base rock over compacted or undisturbed native soil or per approved engineering plans with a minimum of 24 feet of clear width or other approved method, which would prevent shoulder degradation).

All surface access roads shall be installed and maintained in a serviceable condition prior to and during construction.

REQUIREMENTS

Access

1. Common Vehicle Access
 - a. All building openings shall be accessible within 200 feet of a public street, private driveway, or other approved access.
2. Points of Access
 - a. Buildings and exterior storage areas sited under 450 feet in depth or width may have a single point of access with approved turnarounds complying with this policy.
 - b. Buildings and exterior storage areas over 450 feet in depth or width, but less than 650 feet in depth or width may be allowed to have a single point of access with approved turnarounds complying with this policy.
 - c. Buildings and exterior storage areas over 650 feet in depth or width shall have a minimum of two means of ingress and egress.

Unusual designs may require additional access points and must receive prior approval by the Fire Marshal (or designee).

- d. All types of vehicle access shall maintain a minimum of 13 feet, 6 inch vertical clearance over the entire width of the access.
- e. All types of access shall not exceed a 10 percent grade or contain any irregularity creating an angle of approach or departure in excess of 10 percent, except as approved by the Fire Marshal (or designee).

3. Emergency Vehicle Access

- a. Access shall be maintained with a minimum clear drive width of at least 20 feet. Additional clear widths may be required and shall be approved by the Fire Marshal (or designee).
- b. Gates, posts, or other barriers approved by the fire department shall be installed at each entrance to emergency vehicle access points.
- c. An approved Fire/Police padlock shall be installed on gates used solely for emergency vehicle access. Fire/Police padlocks may be used in conjunction with other approved locking devices. Padlocks shall be an approved City of Fresno bypass lock.
- d. Entrances to all emergency vehicle access points shall be posted with permanent signs with the following wording: "FIRE LANE" in six-inch letters, "VEHICLES REMOVED AT OWNER'S EXPENSE" in two-inch letters, and display a telephone number the vehicle owner can call to recover their vehicle. (See: *Requirements for Marking Fire Lanes on Private Property Policy No. 403.005*)
- e. Emergency vehicle access shall be marked with "FIRE LANE" markings at 50 foot intervals. (See: *Requirements for Marking Fire Lanes on Private Property Policy No. 403.005*)
- f. Assurance of the integrity and reliability of emergency vehicle access points may require the dedication of a fire protection access easement to the City or County.
- g. All weather access roads shall be installed and maintained in a serviceable condition prior to and during construction.

4. Parking

- a. Regardless of parking configurations, a minimum clear drive width of 20 feet shall be required.
- b. The Fire Marshal (or designee) may require increases in these widths.

5. Turnarounds

- a. Buildings and exterior storage areas with a single point of access in excess of 150 feet in length are required to be provided with approved turnarounds. Turnarounds shall be located within 150 feet of the termination of the single entry road. Portions of the road requiring fire apparatus to back up shall not include any turns or bends, except for the required turnarounds. The maximum length of a single point of access shall be 450 feet.
- b. Intermediate turnarounds shall be required for multiple points of access exceeding 700 feet in length.
- c. All turnarounds shall have a minimum 44-foot centerline turning radius with a minimum of 20 feet clear drive width. "T" turnarounds shall have a minimum clear drive width of 24 feet and shall be a minimum of 90 feet in length.
- d. Turnarounds shall be kept clear of all obstructions and marked as required.

6. Aerial Fire Apparatus Access

- a. Where roof eaves are more than 30 feet in height, measured from grade, 26-foot driveways shall be located directly adjacent to at least one side of the building. The aerial fire apparatus access shall extend at least 45 feet beyond each end of the building. This allows for access to the corners of the building and to accommodate a set up area out of the collapse zone. Aerial fire apparatus access shall comply with all access and turnaround requirements.
- b. Aerial fire apparatus access (near edge) shall be located a minimum 15 feet and a maximum 30 feet away from the building.
- c. Overhead utility and power lines shall not be located over the aerial fire apparatus access road or between the aerial fire apparatus road and the building.

- d. Aerial fire apparatus points shall be located on the long side of the building.
- e. The Fire Marshal (or designee) may approve an alternate location based on project constraints.

7. Fire Hose and Equipment Access

- a. Required walking access shall be designed to prevent sharp turns and obstacles which would hinder the carrying of hoses, ground ladders and other hand-held equipment. All gates across fire hose and equipment access points shall be a minimum of four feet clear width.

8. Emergency Vehicle Access

- a. Emergency only access is dedicated for the exclusive use of fire department apparatus and is required where common vehicle access is either inadequate or unreliable. Emergency only access shall be a minimum of 20 feet in clear drive width. Additional clear widths may be required and must be approved by the Fire Marshal (or designee).
- b. Turnaround requirements for emergency vehicle access shall be the same as referred to in Section 5, Turnarounds.
- c. Gates, posts, or other barriers approved by the fire department shall be installed at each entrance to emergency only access points.
- d. A single Fire/Police padlock may be installed on gates used solely for emergency only access or it may be used in conjunction with other approved locking devices. Padlocks shall be an approved City of Fresno bypass lock.
- e. The entrances to all emergency vehicle access points shall be posted with permanent signs with the following wording: "FIRE LANE" in six-inch letters, "VEHICLES REMOVED AT OWNER'S EXPENSE" in two-inch letters, and display a telephone number the vehicle owner can call to recover their vehicle. (SEE: *Requirements for Marking Fire Lanes on Private Property Policy No. 403.005*)
- f. Assurance of the integrity and reliability of emergency vehicle access points may require the dedication of a fire protection access easement to the City or County.

- g. All weather access roads shall be installed and maintained in a serviceable condition prior to and during construction.

REFERENCES

California Building Code

California Fire Code

California Fire Code, Appendix D (for Section 6, Aerial Fire Apparatus Access)

City of Fresno Public Works Standard Drawings

Fire Prevention Policy

Section 403.005, Requirements for Marking Fire Lanes on Private Property