



City of Anaheim
Fire Department
Fire Prevention Bureau
Specifications and Requirements

Subject: ACCESS AND FIRE HYDRANT STANDARDS FOR NEWLY CONSTRUCTED RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL DEVELOPMENTS

References: California Fire Code 2007 Edition, Chapter 5 and Appendix B

Access roads shall be required for every building, facility or portion thereof which is located more than 150 feet from fire department vehicle access, as measured by an unobstructed approved route around the exterior of the building.

MINIMUM REQUIREMENTS FOR FIRE ACCESS ROADS

Minimum Widths

1. 20 feet - clear of any ground level or vertical obstruction
2. 24 feet - when providing access to carports or open parking spaces
3. 26 feet - for buildings more than three stories in height. Access road shall be a minimum of 10' from the building.

To allow parking on one side, these dimensions shall be increased a minimum of eight feet. To allow for parking on both sides, the dimensions shall be increased a minimum of 16 feet.

Minimum Vertical Clearance

Fourteen (14) feet vertical clearance shall apply to archways, cantilevered structures, balconies, signs, lamps or other projections for the minimum width.

Minimum Corner Cutoffs or Radius

17.5-foot radius - where a 20-foot wide access way is provided. Refer to City of Anaheim Engineering Standard 106 for additional information, if necessary.

Grades

All streets (public or private) and driveways shall have a maximum grade of 10%, and shall conform to City of Anaheim engineering standards.

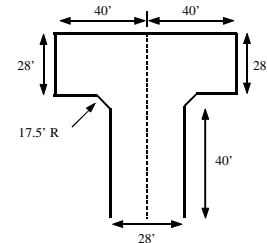
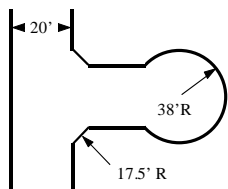
Weight

All access ways must be designed to carry the weight of a 70,000 lb. fire apparatus.

Turn-Around Areas

Turn-around areas are required for any access road in excess of 150 feet.

1. **Cul-de-sac turn around areas** must have a minimum 38-foot radius to the curb (76 foot diameter). No parking shall be permitted and the area shall remain clear of all permanent or immovable structures or obstructions.
2. **Hammerhead or T turn-around areas** must have a minimum lane width of 28 feet. Top of T will be 80 feet long, 40 feet off center in each direction.



Gates and Speed Bumps

Gates shall open to provide a minimum of 20-foot clear width.

Exception: separate gates provided for both ingress and egress may be a minimum of 12 feet each.

Electrically operated gates shall be provided with a Knox override switch located on the entry side of the gate in an approved location. Manually operated gates shall be provided with a Knox padlock. In addition, all electrically operated gates providing fire access to greater than twenty residential units, or when otherwise required by the Chief, shall be provided with an approved remote opening system that is controlled by an approved public safety radio frequency.

Speed bumps and directional barriers such as spikes are not permitted in fire access roads.

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Access to Rescue Windows and other Required Openings

All buildings equipped with openings, as required by the Fire and Building Code shall be provided with an approved direct access route from the fire access road to accommodate fire department operations. The access route shall be a minimum of six (6) feet in width and be designed to accommodate a twenty-one (21) foot fire department ladder. A clear area of at least eight (8) feet in width shall be maintained free of permanent obstructions below all required rescue windows to allow for fire department ladder placement.

FIRE HYDRANTS

Location and Installation

No structures, facilities or portions thereof shall be more than 300 feet travel distance from a fire hydrant. All hydrants, public or private, shall be installed in accordance with the City of Anaheim Water Engineering Standard W-110, with the following exceptions:

1. Private on-site fire hydrants shall be located at least 40 feet from any structure where possible and identified by installation of blue reflective markers.
2. Private on-site fire hydrants shall be located no closer than 24 inches and no more than 26 inches from the face of the curb to the center of the hydrant barrel.
3. No portion of a vehicle, mobile home, manufactured housing park, sales or storage lot shall be more than 600 feet travel distance from a fire hydrant.

Protective devices (curbs, rails, concrete-filled pipes, etc.) shall be provided to protect all fire hydrants from vehicular traffic where adjacent to vehicular access ways. Such devices shall not obstruct use of the hydrant connections. A three (3) feet clearance must be provided around all hydrants.

Type of Fire Hydrants

Fire hydrants shall have two (2) 2-½ inch connections, and one (1) four inch connection, served by a minimum six inch water line.

- a. Larger water lines are required when serving more than one hydrant.
- b. If the water line is capable of providing in excess of 3,000 gpm, the hydrants shall have one (1) 2-½ inch connection and two (2) four inch connections.

Parking Clearance

Parallel parking is prohibited for 7 ½ feet on each side to permit accessibility to the hydrant.

Fire Flows

All hydrants, public or private, must be designed to provide a minimum 1,500 gallons per minute at 20 psi residual pressure.

All fire flow requirements shall be established according to California Fire Code, Appendix B.

For further information regarding these requirements contact: Fire Prevention Bureau at (714) 765-4040 between the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday.