



Rancho Cucamonga Fire Protection District

Fire Inspection Bureau Standard

Title: Fire Apparatus Access Roads	
Standard # 5-1	Effective: 12/18/03
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INTENT

The intent of this standard is to establish consistent requirements for fire apparatus access roads required by the Fire Code.

AUTHORITY

This standard is in accordance with RCFPD Ordinance FD 46 and the 2007 California Fire Code.

ADOPTED STANDARD

1. **Design, Construction, and Maintenance of Fire Apparatus Access Roads.**

- a. The design and construction materials of fire apparatus access roads shall be submitted with site plans and shall be approved prior to installation.
- b. In accordance with Section 503.1.2 of the Fire Code, when conditions or circumstances warrant, the fire code official is authorized to require more than one fire apparatus access road.
- c. The width of a fire apparatus access road shall not be less than 26 feet.
Exception- Access roads at entry medians constructed for private commercial, industrial, or residential developments shall be a minimum of 20 feet on each side. The 20-foot access road shall not be a part of a radius turn. This exception does not apply to public streets.
- d. The unobstructed vertical clearance of a fire apparatus access road shall not be less than 14 feet 6 inches.
Exception- Overhead and/or vertical obstructions shall not be located within an aerial fire apparatus access road. See Section 503.7 of the Fire Code.
- e. Fire apparatus access roads shall be designed to withstand 80,000 pounds of gross vehicle weight in all-weather conditions. When required by the fire code official, a stamped and signed report by a registered engineer in the State of California shall be provided when plans are submitted for review and approval. The report must certify the design of the fire apparatus access road.
- f. Fire apparatus access roads shall be continuously maintained and remain unobstructed during construction. Please refer to RCFPD Standard 14-1 for fire apparatus access road construction requirements prior to and during construction. Please refer to RCFPD Standard 14-2 for temporary fire apparatus access roads.
- g. Fire apparatus access roads where fire hydrants are installed shall be designed and constructed to accommodate the full flow of the hydrants under testing conditions without damaging the road.

- h. Dips, humps, traffic calming devices, or other surface irregularities shall not be installed without prior consent of the fire code official and shall not impede the movement of fire apparatus having a wheelbase of 350 inches with a minimum ground clearance of 11 inches. **Note:** Traffic calming shall be primarily accomplished by the use of a speed cushion concept and design. Manufactured speed cushions available from Traffic Logix (<http://www.trafficlogix.com/speed-cushions.asp>), Road Kare International (<http://www.roadkare.net/index.php>), and other vendors with comparable products are approved for use. Speed cushions constructed of concrete or asphalt that utilize a design similar to manufactured products are also approved. Submit plans and specifications for review and approval prior to installing speed cushions.
- i. The maximum grade of a fire apparatus access road shall not exceed 12%.
Exception- The maximum grade of an aerial fire apparatus access road shall not exceed 5%.
- j. The maximum cross grade of a fire apparatus access road shall not exceed 5%.
- k. The minimum outside turning radius shall be 46 feet and the maximum inside radius shall be 20 feet.
Exception- When an outside radius greater than 46 feet is provided, the inside radius may increase in proportion to the outside radius.
- l. Grade breaks in a fire apparatus access road shall not be greater than 9° or 20% on either side of the break.
- m. Fire apparatus access road dead-ends in excess of 150 feet shall be provided with an approved means to turn around such as an approved cul-de-sac, bulb, or hammerhead.
- n. Turf Block and similar concrete sub-systems shall not be used in the construction of a fire apparatus access road. Grasspave2, Garvelpave2, and similar porous systems will be considered in limited applications. Such systems shall be specifically approved by the fire code official prior to installation and shall be in accordance with RCFPD Standard 5-2.
- o. Gates installed across a fire apparatus access road shall be approved by the fire code official and shall be in accordance with RCFPD Standards 5-3 and 5-4.
- p. Removable bollards installed to limit access to fire apparatus access roads that are designated emergency vehicle access only shall not exceed 40 pounds and shall be approved by the fire code official prior to installation.

2. **Identification of Fire Apparatus Access Roads.** Fire apparatus access roads shall be identified by at least one of the following methods. The fire code official may require additional means of identification as necessary to adequately identify access roads.

a. **Curb Painting.**

- i. The curb adjoining a fire apparatus access road shall be painted red. The words “FIRE LANE-NO PARKING” shall be clearly stenciled on the top and face of the curb at intervals not exceeding 30 feet. The letters shall be white, 3 ½ inches high, and ½ inch stroke.
- ii. Every section of curb more than 4 feet in length that adjoins the fire apparatus access road must be painted red; all curbs exceeding 8 feet shall be painted red and stenciled.

b. **Sign Posting.**

- i. Signs shall be posted immediately adjacent to, visible from, and along the entire length of the fire apparatus access road. The sign shall read, “FIRE LANE-NO PARKING”.

- ii. The signs shall be installed facing the direction of travel at intervals not exceeding 100 feet. The spacing may be reduced at the discretion of the fire code official.
- iii. The signs shall be installed 2 feet inside the curb line or edge of pavement. Signs may be required to be installed on walls, fences, gates, or other structures in order to adequately identify the fire apparatus access road.
- iv. Where the entire roadway width is designated as a fire apparatus access road, signs shall be posted on both sides. The sign spacing shall not exceed 100 feet between any two signs on the same side of the roadway.

b. Pavement Marking.

- i. The roadway shall be painted with 5-inch red stripes to designate the 26-foot wide dimension of the fire apparatus access road. The words "FIRE LANE" shall be stenciled at each end of the fire apparatus access road. The letters shall be white, 2 feet in height with a 3-inch stroke.
- ii. Where the fire apparatus access road exceeds 150 feet but is less than 300 feet, the words "FIRE LANE" shall be stenciled at both ends of the fire apparatus access road and at least once at the midway point.
- iii. Where the fire apparatus access road exceeds 300 feet, the words "FIRE LANE" shall be stenciled at both ends of the fire apparatus access road and at intervals of 150 feet or less. The stenciling must be equally distributed throughout the fire apparatus access road.

2. Maintenance of Fire Apparatus Access Roads

- a. Maintaining the fire apparatus access road unobstructed shall be the responsibility of the owner of the building, the tenants, employees, visitors and all delivery personnel.
- b. Maintenance of the fire apparatus access road paving, curb painting, signs, pavement striping, and stencils shall be the responsibility of the property owner and/or property manager.
- c. All violators will be cited in accordance with the Rancho Cucamonga Municipal Code, the California Vehicle Code, and the Fire Code.