



# Hurst Fire Department

*"Making the Difference"*

## Fire Lane and Gate Access Guidelines

**SCOPE:** The information provided herein serves as a planning tool for compliance and is not conclusive of all requirements set forth within the 2015 International Codes or adopted amendments. It does not remove the responsibility of the owner to comply with all laws applicable to fire lane design and installation or fire lane access gates.

### **Basic Requirements:**

- Rules and Regulations adopted by the State Board of Insurance and the State Fire Marshal's Office.
- 2015 International Codes as Amended
- Applicable National Standards

### **APPROVAL**

The Fire Marshal's office shall be notified prior to any construction, installation or alteration of any building or equipment affecting Fire Department access. Complete information regarding the design or alterations, including specifications, diagrams, type and location of equipment shall be submitted for approval. A permit is required for most installations or alterations.

**501.4 Timing of Installation.** When fire apparatus access roads or a water supply for fire protection is required to be installed for any structure or development, they **shall** be installed, tested, and approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

**503.1.1 Buildings and facilities.** *Approved* fire apparatus access roads shall be provided for every facility, building or portion of a building. The fire apparatus access road shall extend to within 150 feet of all portions of the facility and all portions of the *exterior walls* of the first story of the building as measured by an *approved* route around the exterior of the building or facility.

**503.2.1 Dimensions.** Fire apparatus access roads shall have an unobstructed width of not less than 24 feet (7315 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 14 feet (4267 mm).

**503.2.3 Surface.** Fire apparatus access roads shall be designed and maintained to support imposed loads of 80,000 lbs. for fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

**D103.4 Dead ends.** Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an *approved* area for turning around fire apparatus. All dead-end fire apparatus access roads shall comply with table D103.4.

**D103.1 Access road width with a hydrant.** Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders.



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**D103.2 Grade.** Fire apparatus access roads shall not exceed 10 percent in grade.

**D104.3 Remoteness.** Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

**D104.1 Buildings exceeding three stories or 30 feet in height.** Buildings or facilities exceeding 30 feet or three stories in height shall have at least two means of fire apparatus access for each structure.

**D105.1 Aerial Apparatus Access Roads.** Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9144 mm), approved aerial fire apparatus access roads shall be provided. For purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater.

**D105.2 Aerial Apparatus Access Width.** Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of the building or portion thereof.

**D105.3 Proximity to building.** At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the *fire code official*.

**503.3 Striping.** Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

**503.3 Signs.** Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high. Signs shall be painted on a white background with letters and borders in red, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.



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### Security Gates

**503.6 Security gates.** The installation of security gates across a fire apparatus access road shall be *approved* by the fire chief. Where security gates are installed, they shall have an *approved* means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be *listed* in accordance with *UL 325*. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of *ASTM F2200*.

**D105.3 Fire apparatus access road gates.** Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. Where a single gate is provided, the gate width shall be not less than 20 feet (6096 mm). Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet (3658 mm).
2. Gates shall be of the swinging or sliding type.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be *approved* by the *fire code official*.
6. Methods of locking shall be submitted for approval by the *fire code official*.
7. Electric gate operators, where provided, shall be *listed* in accordance with *UL 325*.
8. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of *ASTM F 2200*.

### KEY BOXES

**506.1 Where required.** Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the *fire code official* is authorized to require a key box to be installed in an *approved* location. The key box shall be of an *approved* type listed in accordance with *UL 1037*, and shall contain keys to gain necessary access as required by the *fire code official*.

**506.1.1 Locks.** An *approved* lock shall be installed on gates or similar barriers where required by the *fire code official*.