



EL DORADO COUNTY REGIONAL FIRE PROTECTION STANDARD

AUTOMATIC AND MANUAL GATES ON FIRE ACCESS ROADWAYS

STANDARD #B-002

EFFECTIVE 03-30-2009

REVISION 01-02-2018

PURPOSE

It is the intent of this standard to provide for quick, reliable and easy access of emergency response fire apparatus into gated communities and facilities.

SCOPE

This standard shall apply to all automatic gates in EDC or EDH installing access control devices or systems.

AUTHORITY

Chapter 5, Section 503 of the California Fire Code, 2016 Edition, requires that 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.

The Fire Chief is authorized to modify any of the provisions of this standard upon application in writing by the owner, a lessee, or a duly authorized representative where there are practical difficulties in the way of carrying out the provisions of this standard, provided that the spirit of the standard is met and public safety is secured. The particulars of such modification and the decision of the Fire Chief shall be entered upon the records of the Department, and a signed copy furnished to the applicant.

DEFINITIONS

Roadway - any surface designed, improved, or ordinarily used for vehicle travel

Driveway - vehicular access that serves no more than two buildings, with no more than three dwelling units on a single parcel, and any number of accessory buildings.

AHJ – agency having jurisdiction

REQUIREMENTS

GATES/ACCESS CONTROL DEVICES

A. Installation Requirement

1. Entrance roads (at the gate) shall have a minimum unobstructed width of fifteen (15) feet each lane if divided, or twenty (20) feet total width if not divided. An unobstructed vertical clearance shall not be less than fifteen (15) feet.
2. Gates over a driveway shall have an unobstructed width of fourteen (14) feet. An unobstructed vertical clearance shall not be less than fifteen (15) feet.
3. All automatic gates shall be equipped with a “Knox” emergency access override system that consists of a low-security key activated switch located in accordance with Fire Department requirements.
4. All automatic gates shall also be equipped with both 3M Opticom Control device. The device shall be placed in a location allowing operation from 75 feet away. Exception: Single-family R-3
5. Linear receiver device (approved by the Fire Department) to allow remote activation by emergency vehicles. Shall be programmed to operate with the Fire Departments current transmitters. Contact local AHJ for transmitter frequencies. Exception: Single-family R-3
6. Automatic gates shall be equipped with a mechanical release.
7. Automatic gate loop systems located on the inside portion of the access roadway shall permit vehicular traffic to open the gate from the inside by driving over the loop. This process shall not take any special knowledge, actions or codes to open the gate to exit the area. The loop system shall also keep the gate open as long as vehicular traffic is passing through it.
8. All automatic gates shall be designed to automatically open and remain in a fully opened position during power failures.
9. All gates creating a dead-end road more than one hundred fifty (150) feet in length shall be provided with approved provisions for the turning around of fire apparatus.
10. The gradient for the fire apparatus access road shall not exceed the maximum approved by the Fire Department. The intent is to provide a level landing area on

either side of the gate to allow emergency apparatus to be parked safely when it is necessary to exit the vehicle for manual gate activation.

11. All automatic gates must reach the fully open position within a total time not to exceed one second for each foot total width.
12. The receiving devices shall be installed so the signal from the transmitter will open the gate approximately 75 feet from the gate location. Exception: Single-family R-3
13. To ensure that the gate/access control devices are properly maintained, a copy of the maintenance contract for the control device or system is required to be supplied to the AHJ. This maintenance contract shall include monthly testing of the control devices, an annual preventative maintenance inspection and emergency repairs as required to maintain the gate and control devices in operative condition. If at any time this maintenance contract is voided for any reason, the access gates shall be locked in the open position and will remain locked until the maintenance contract is restored.
14. Prohibited Devices: All required vehicle access openings shall provide both ingress and egress. Direction limiting devices, such as fixed tire spikes, are prohibited. No device may be used which will delay the ingress or egress of emergency responders. The total number of vehicle access control gates or systems, through which emergency equipment must pass to reach any address, shall not exceed one.

B. Manual Gates

1. Manual gates shall have a KNOX padlock installed for emergency access.

C. Plans

1. Plans for the installation of automatic gates on fire apparatus shall be submitted to the AHJ for approval prior to installation.
2. One set of electronic plans is required to be submitted per the direction of the AHJ.

D. Testing and Acceptance

1. Gates and access control equipment shall not be placed into service prior to being inspected and tested by the AHJ.