



EL DORADO COUNTY REGIONAL FIRE PROTECTION STANDARD

AUTOMATIC & MANUAL GATES ON FIRE ACCESS ROADWAYS & DRIVEWAYS

STANDARD #B-002

EFFECTIVE 03-30-2009

REVISION 02-21-2019

PURPOSE

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

SCOPE

This standard shall apply to all automatic gates in El Dorado County 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 shall be complied with 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 shall be furnished to the applicant.

DEFINITIONS

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

Driveway - a 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

AHJ – agency having jurisdiction

REQUIRMENTS

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 a minimum unobstructed width of fourteen (14) feet. The gate shall be a minimum of two (2) feet wider than the road/driveway surface. An unobstructed vertical clearance shall not be less than fifteen (15) feet.
3. Gates shall be inset off the roadway as to avoid stacking and to provide an area of refuge while the gate is operated and opened. This inset shall be a minimum of thirty (30) feet from the adjacent roadway or driveway edge. The key pad shall be placed within ten (10) feet of the gate. If the key pad is placed more than ten (10) feet from the gate, then the gate inset shall be increased respectively to accommodate the additional footage.
4. 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.
5. 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
6. 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
7. Automatic gates shall be equipped with a mechanical release.
8. 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.
9. All automatic gates shall be designed to automatically open and remain in a fully opened position during power failures.

10. All gates creating a dead-end road in excess of one hundred fifty (150) feet in length shall be provided with approved provisions for the turning around of fire apparatus.
11. 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 in a safe manner when it is necessary to exit the vehicle for manual gate activation.
12. All automatic gates must reach the fully open position within a total time not to exceed one second for each foot total width.
13. 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
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 access roadways shall be submitted to the AHJ for approval **prior** to installation.
2. The number and type of plans (*paper or digital*) shall be submitted per the direction of the AHJ.

D. Testing and Acceptance

1. Gates and access control equipment shall be inspected and tested by the AHJ **prior** to being placed into service.