



## Security Gates - Policy

[revised 02/19/2015]

**Submittals and gates must comply with this policy.  
Policies and updated application forms are available at [www.cor.net/fire/permits](http://www.cor.net/fire/permits).**

### I. General

Security gates across fire apparatus access roads must comply with this Policy. Pedestrian gates and similar barriers that obstruct Fire Department access, when required by the fire code official, must comply with this Policy.

### II. Authority

2012 International Fire Code as amended and adopted by the City of Richardson [ord. 4007]:

**202 GENERAL DEFINITIONS: ...FIRE APPARATUS ACCESS ROAD.** A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as fire lane, public street, private street, parking lot lane and access roadway.

**503.1.1 Buildings and Facilities.** Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall extend to within 150 feet (45 720 mm) 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. Except for single- or two-family residences, the path of measurement shall be along a minimum of a ten feet (10') wide and approved, unobstructed pathway around the external walls of the structure.

**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 F 2200.

**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 when required by the fire code official.

### III. Residential Vehicular Gates

All automatic security gate systems that cross utility access easements and/or fire apparatus access roads in residential locations shall comply with all the following:

A. Radio Receiver: The gate(s) shall operate upon activation of an approved radio transmitter/receiver system:

1. The receiver shall be a 2-channel modular receiver in the 400+ MHZ frequency range, preset to a specific digital code designated by the Fire Marshal [programmer can contact Fire Marshal's Office for code];
2. The receiver shall be equipped with one external, weather tight, antenna assembly;
3. The system shall have a flashing, 115 volt, external lamp assembly, with a red globe, mounted separately from the receiver, clearly visible from the entry side of the gate, which operates only on radio activation of the gate opener;
4. The receiver shall be located to receive a clear signal from the transmitter, operated from inside the emergency vehicle, at a distance of at least 100 feet from the receiver;
5. Activation of the radio receiver shall override all other gate operating systems;
6. All components shall be protected from weather and physical damage as necessary;
7. Gate shall operate at minimum one foot per second at its edge;
8. The gate shall remain open, and the lamp shall continue flashing, for sixty minutes. After sixty minutes, the system will reset automatically, or can be manually reset, if necessary. [See Diagram A, attached].

Continues→

- B. Manual Back up Required: A back-up system shall provide access in event of power, or other failure of the system:
- Swinging gates and barrier arms:
1. Shall be operable by one person, upon removal of an approved Knox padlock and/or pin secured in the gate arm;
  2. The Knox padlock and/or pin shall be clearly visible and easily accessible from the entry side of the gate.

Sliding gates:

1. Shall be operable by one person, after operating an approved manual release device;
2. The manual release device shall be protected in a weatherproof box that is:
  - Red in color;
  - At least 5 inches high, 5 inches wide, and 1 ½ inches deep;
  - Clearly and permanently labeled, "FIRE DEPT" in white block letters 1" tall with a ¼" inch stroke;
  - Located within 10 feet from the entry side of the gate;
  - Clearly visible and easily accessible from the entry side of the gate; and
  - Secured with an approved Knox padlock.

Other back-up systems must be approved by the Fire Marshal.

- C. Keypad Required: Gates shall open automatically for Fire, Police, and Sanitation services, using two, four-digit codes assigned by the Fire Marshal [System programmer can contact Fire Marshal's Office for codes]:
1. The keypad shall be on the left side of the approach, easily accessible from within a full size standard vehicle;
  2. Gate shall operate at minimum one foot per second at its edge, and shall close after a reasonable period.
  3. The flashing red alert lamp shall not activate.

#### IV. **Non-Residential Vehicular Gates**

All automatic security gate systems that obstruct utility access easements and/or fire apparatus access roads in non-residential locations shall comply with all of the following:

A. Automatic [electromechanically operated] Gates:

1. Key switch Required: Gates that operate electromechanically must open upon activation of a manually operated Knox key switch [3500-series] using Richardson Fire Department's Knox security key:
  - a. When requested by the Fire Chief, key switch operation shall open multiple gates;
  - b. The key switch shall be a minimum of ten (10) feet from the gate, on the left side of the approach;
  - c. The key switch shall be on a pedestal with the key switch facing the approach side of the fire lane;
  - d. The switch shall be minimum four feet-six inches (4'6") to maximum five feet-five inches (5'5") high.
2. Keypad Required: Gates shall open automatically for Fire, Police, and Sanitation services, using two, four-digit codes assigned by the Fire Marshal [System programmer can contact Fire Marshal's Office for codes]:
  - a. The keypad shall be on the left side of the approach, easily accessible from within a full size standard vehicle;
  - b. Gate shall operate at minimum one foot per second at its edge, and shall close after a reasonable period.
3. Manual Back-up Required: A back-up system shall provide access in event of power, or other failure of the system:

Swinging gates and barrier arms:

- a. Shall be openable by one person, after removal of a Knox padlock [model 3770] and/or pin in the gate arm;
- b. The Knox padlock and/or pin shall be clearly visible and easily accessible from the entry side of the gate.

Sliding gates:

- a. Shall be openable by one person, after operating an approved manual release device;
- b. The manual release device shall be protected in a weatherproof box that is:
  - Red in color;
  - At least 5 inches high, 5 inches wide, and 1 ½ inches deep;
  - Clearly and permanently labeled, "FIRE DEPT" in white block letters 1" tall with a ¼" inch stroke;
  - Located within 10 feet from the entry side of the gate;
  - Clearly visible and easily accessible from the entry side of the gate; and
  - Secured with an approved Knox padlock.

Other back-up systems must be approved by the Fire Marshal.

- B. Manually Operated Gates: When locked, gates shall be operable using Richardson Fire Department Knox security key to unlock an approved Knox padlock [model 3770], or other approved device, accessible from the approach side.

## V. Pedestrian Gates – Residential and Non-Residential

When required, in residential and non-residential locations, pedestrian gates and similar barriers that obstruct Fire Department access shall be operable using the Richardson Fire Department Knox security key to unlock an approved Knox padlock [model 3770], or other approved device, accessible from the approach side. [See example detail on page 6.]

### Review Procedure

#### A. Development Services Review:

The fence/gate(s) must first be approved by the Development Review Team. Contact the Development Coordinator for information [(972) 744-4240];

#### B. Building Inspections Review:

A fence permit must be obtained from the Building Inspections Department [(972) 744-4180]. The fence permit will be issued subject to the approval of the Fire Marshal's Office.

#### C. Fire Department Review – A Security Gate Permit must be obtained from the Fire Marshal's Office prior to installation of the gate. Applications and submittals shall include:

1. A completed and signed Richardson Fire Department *Security Gate Across Fire Apparatus Access Roads Construction Permit Application* [available at [www.cor.net/fire/permits](http://www.cor.net/fire/permits)];
2. One (1) set of plans, unbound:  
Plans that do not specifically address the requirements of this policy should not be included, e.g. "Tree Schedule", or "Building Elevations" should not be submitted unless applicable to the permit.
3. Documentation and details necessary to indicate how each specific requirement of this Policy is met:
  - a. Plans shall be to scale, and shall indicate the location of the keypad, fence and gate(s), radio receiver, beacon, manual release, property lines, fire lanes, fire apparatus access roads, fire hydrants, fire department connections, buildings and any other applicable element(s);
  - b. Manufacturer's cut-sheets/installation instructions for operators, keypads, release systems, radio receivers, etc., shall be submitted with the Application;
  - c. Adequate details and other submittals necessary to demonstrate compliance with this Policy.
4. Permit fees are payable via check to "City of Richardson", and credit card, upon issuance of the permit. Fees may not be paid in advance.

## VI. Maintenance and Testing

#### A. Inspections:

1. Permit holder shall not request inspection until all work to be approved is completed and pre-tested;
2. Permit holder shall request inspections by emailing [firepermits@cor.gov](mailto:firepermits@cor.gov), or by calling (972) 744-5750, at least one full business day in advance. Fire Marshal's Office will try to accommodate, but cannot guarantee availability for the requested time;
3. Applicant shall ensure that person(s) familiar with the permitted work are present during inspection;
4. *Initial inspection and first re-inspection of any permitted system or commercial fire inspection, no fee is assessed. For each necessary inspection thereafter, a fee of one hundred dollars (\$100) per inspection shall be assessed. [per Resolution 08-14].*

#### B. Property Owner is responsible for maintenance of applicable systems:

1. Mechanical components shall be serviced on a regular basis and maintained as approved;
2. Electrical components shall be maintained as approved;
3. A power supply shall be maintained to electric components at all times; and

#### C. All components of the gate operating system including radio receivers, Knox key switch, Knox padlocks, and other devices, shall be provided, installed and maintained by the property owner.

#### D. Richardson Fire Department may conduct routine tests of each permitted gate opening system;

#### E. When any gate opening system fails to perform in an approved manner, the property owner shall disable the operator, and shall secure [lock] the gate in the open position until repaired. Richardson Fire Department may require a test of the system prior to permitting the owner to return it to service.

### Attachments:

Diagram A – Installations

Diagram B – Pedestrian Walkway Security Gates

# INSTALLATIONS

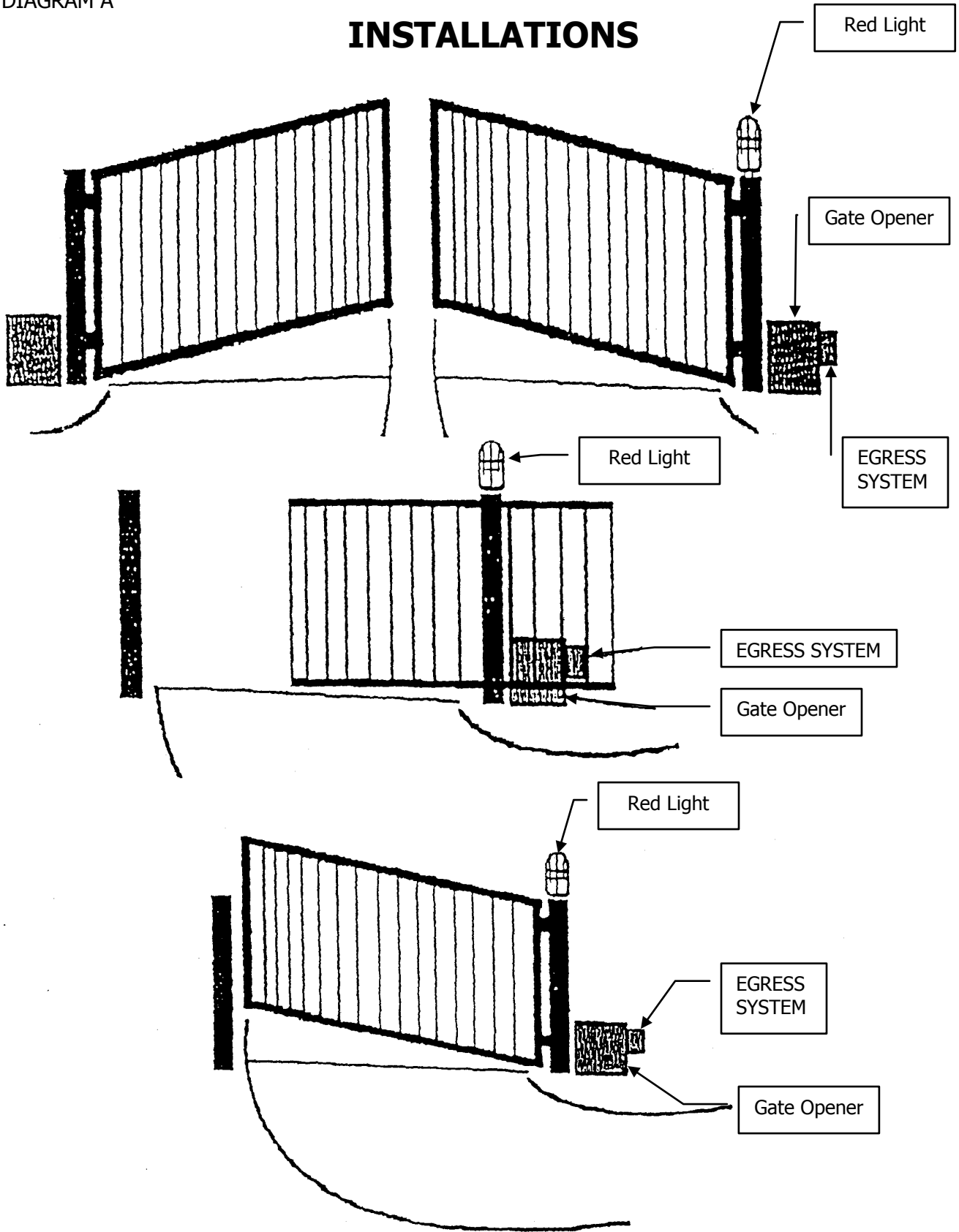
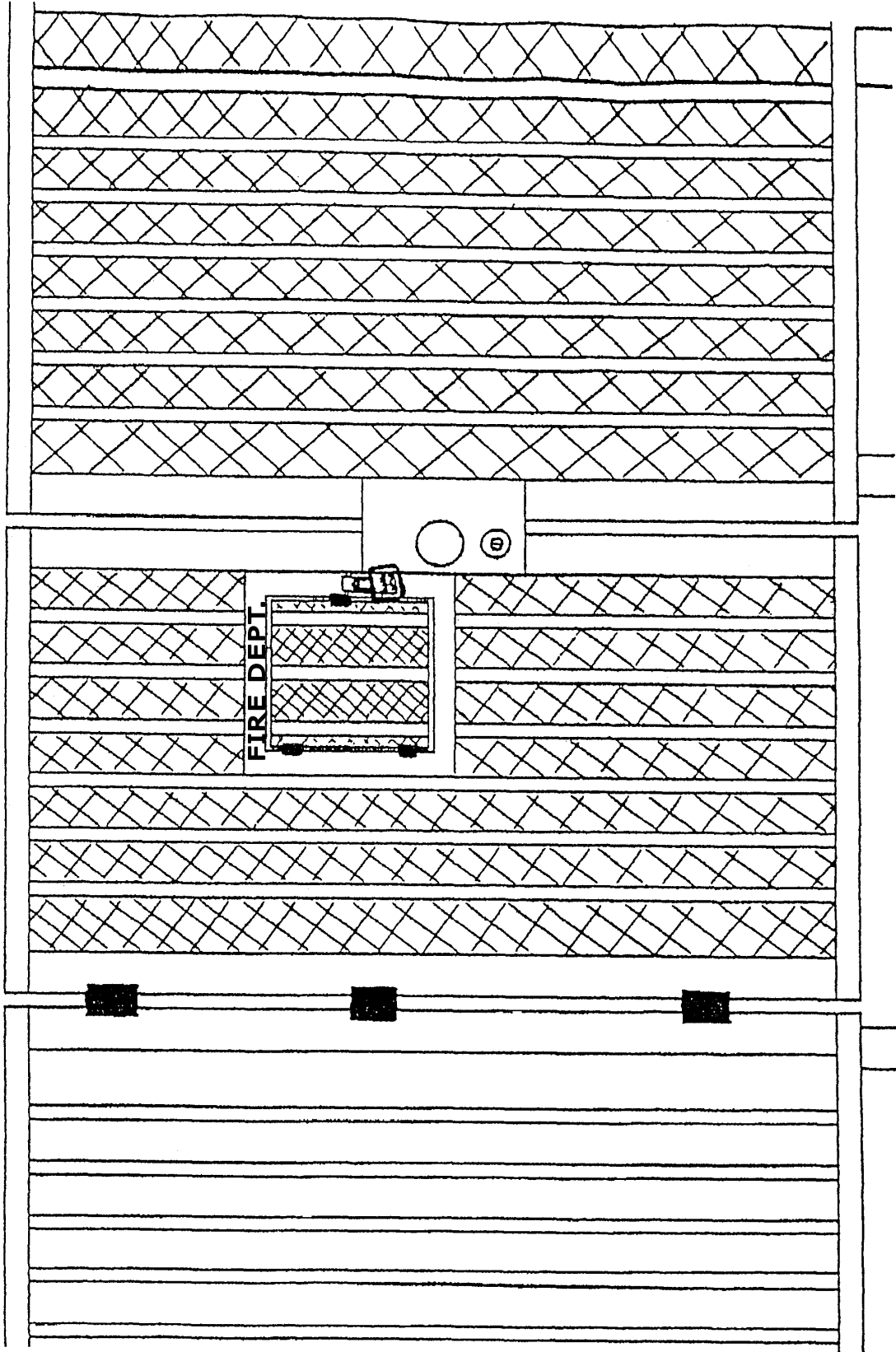


DIAGRAM B

**PEDESTRIAN WALKWAY SECURITY GATES**



**KEY ACCESS GATE  
FREE EXIT**