



## ROUND ROCK FIRE DEPARTMENT

### FIRE MARSHAL'S OFFICE

#### **EMERGENCY ACCESS CONTROLLED GATE SYSTEMS GUIDELINES**

This document is designed to provide guidance for plan submittal and the installation of Emergency vehicle access onto properties that are equipped with automatic security gates or vehicle access/egress gates installed across fire lanes.

#### **GENERAL NOTES**

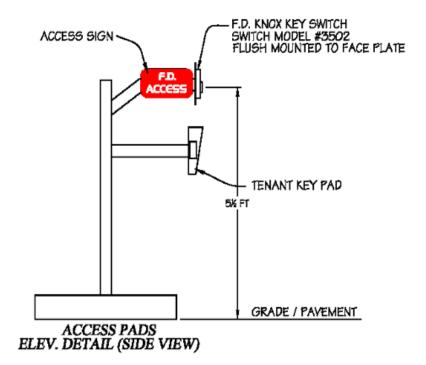
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	A City approved Knox® key switch shall be used for 24-hour Fire Department access. The emergency key switch, when activated, shall bypass any occupant control and/or loop systems.	
	The key switch shall open both the entrance and exit gates when gates are near each other.	
	The Knox® key switch shall be mounted 5 ½ feet above grade.	
	The minimum clear opening width shall not be less than the width of the required fire lane or access drive. The gate and/or its components shall not encroach on the minimum fire lane width (20-feet or 26-feet) and the minimum unobstructed height of 13 ½ feet shall be maintained.	
	In the event of power failure, the gate shall open freely. It shall be capable of manual opening by one person of average stature.	
	The gate motor shall be the type that the drive gear disengages on power failure OR the gate opens and remains open upon power failure.	
	Gate systems shall comply with UL 325 and ASTM F2200	
	Areas of the City of Round Rock that border other jurisdictions may require a dual Knox® key switch so that neighboring jurisdictions can access the property. Contact 512-218-6628 to verify if a dual Knox® key switch will be required.	
TOMATIC PRIMARY OR MAIN GATE		

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- Primary gate is defined as the drive or access point(s) designed as a primary point of ingress/egress for emergency vehicles.
- The following access systems shall be installed on all Primary Gates:
  - o Opticom IR platform receiver and transmitter. When activated via the Opticom receiver, the gate(s) shall remain open for 20 minutes.
  - o Knox® key switch
  - The gate opening system shall incorporate a fail-safe manual backup or automatic release in the event of a failure of the electrical or mechanical equipment. The manual release may be in the form of a pull cable that disengages the chain drive or a 911 Pin-Lock that disengages the arm of a swing gate. (See figure 2 and figure 3)

AUTO	OMATIC SECONDARY GATES (including Main Gates to Storage Facilities)	
	An Automatic Secondary Gate is the drive or access point designed as a secondary or back-up means of ingress/egress for emergency vehicles that is provided with a gate motor.  The following access systems shall be installed on all Automatic Secondary Gates:  Opticom IR platform receiver and transmitter. When activated via the Opticom receiver, the gate(s) shall remain open for 20 minutes.  Knox® key switch  The gate opening system shall incorporate a fail-safe manual backup or automatic release in the event of a failure of the electrical or mechanical equipment. The manual release may be	
	in the form of a pull cable that disengages the chain drive or a 911 pin lock that disengages the arm of a swing gate. (See figure 2 and figure 3)	
MANUAL SECONDARY GATES		
	A Manual Secondary Gate is the drive or access point designed as a secondary or back-up means of ingress/egress for emergency vehicles that is normally locked closed and does not provide ingress/egress for non-emergency vehicles.  The following access systems shall be installed on all Manual Secondary Gates:	
	<ul> <li>Shall be equipped with a manual disconnect to allow manual opening of the gate by emergency service personnel. Such manual opening system may be a Knox® padlock and chain.</li> </ul>	
OPTI	COM IR PLATFORM RECEIVER	
	Shall be mounted 8 to 10 feet from grade.	
	Shall be mounted behind the access gate (property side).  Detectors sight path shall be free of visual obstructions such as signs, covered parking canopies, and vegetation.	
KNO	X® SERIES 3500 KEY SWITCH	
	Knox® key switches shall be provided as a manual backup.	
	The entrance Knox® switch shall be located above the property's keypad, 5 $\frac{1}{2}$ feet from grade. (See figure 1)	
	If a property keypad is not provided, the Knox® switch shall be located near the right guidepost, mounted 5 $\frac{1}{2}$ feet from grade.	
	A sign identifying "FD ACCESS" shall be mounted above the Knox® switch.	
	Upon activation of the key switch, the affected gate shall automatically open to a locked open and disabled condition.	
911 PIN-LOCK SYSTEM FOR SWING TYPE GATES		
	The 911 Pin-Lock system shall be incorporated into all swing type security gates to provide a manual release for the fire department. In addition, the owner can disconnect the swing arm without contacting the fire department ( <i>See figure 2</i> ).	
	Chain link gates may require a hole large enough for a hand to get through near the 911 Pin-Lock so that the Knox® padlock can be accessed from outside of the gate.	
PERFORMANCE TEST		
	Gates and gate systems shall be tested by the Fire Marshal's Office upon completion of the installation.	
	Gates shall not be placed in operation until the acceptance test is complete and approved.	

# Figure 1 – Knox® Key Switch Mounting



## Figure 2 – 911 Pin-Lock System for Swing Gates

The 911 Pin-Lock Too™ allows a swing gate to meet fire department requirements for a manual release, while still allowing the consumer to disconnect the gate arm from their gate without having to call the fire department.





The 911 Pin-Lock Too™ incorporates two blocks and one double pin.

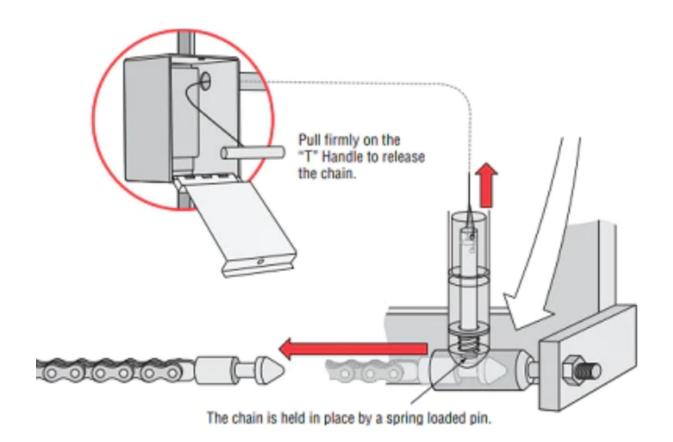


Secure the bottom block with a 3/8" diameter and a 1" x 1" shackle padlock. Insert the other end of the pin up through the gate bracket and the swing gate arm.



Place the other block on the pin and secure with a Knox<sup>TM</sup> Padlock.

Figure 3 – Manual Release for Sliding Gates





Fire Dept. Access box with Knox® Padlock on front