

COLORADO SPRINGS FIRE DEPARTMENT

# Rapid Entry System

General requirements and ordering information for Knox™ systems.



CODE SERVICES  
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## PURPOSE

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This guidance document has been developed in an effort to provide the highest level of service to the customers of the Colorado Springs Fire Department. Rapid entry systems, aka Knox™ Box, allow quick entry into a facility, with minimal damage to the facility.

## SCOPE

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This document outlines the requirements set forth in the adopted International Fire Code, local amendments, and department policies as they relate to the installation Knox™ systems. This document is not intended to provide an all-inclusive listing of submittal and inspection requirements, as it would be virtually impossible to cover all situations.

## DEFINITIONS

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CSFD	Colorado Springs Fire Department
IFC	International Fire Code

## GUIDELINES

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### I. INTRODUCTION

#### A. APPLICABLE CODES AND STANDARDS.

1. 2015 International Fire Code and local Amendments.

### II. GENERAL INFORMATION AND REQUIREMENTS

#### A. WHEN REQUIRED. Approved rapid entry equipment shall be installed in an accessible area for any of the following situations:

1. Any building equipped with a monitored fire protection (suppression and/or detection) system.
2. When access to or within a structure or area is unduly difficult because of secured openings.
3. Where immediate access is necessary for life-saving or firefighting (i.e., locked apartment buildings).

#### B. NON-REQUIRED EQUIPMENT. Occasionally orders are received for non-required Knox™ equipment. CSFD will not place orders for non-required equipment without justification from the customer and approval by the Fire Code Official.

#### C. APPROVED EQUIPMENT. Key lock boxes and similar products manufactured by the Knox™ Company are the only type approved by CSFD. All Knox™ products shall be ordered directly through the Division of the Fire Marshal. The only products authorized by CSFD include:

1. Surface mounted Knox™ Box hinged (3200 or 4400 series)
2. Recessed Knox™ Box hinged (3200 or 4400 series)
3. Padlock for manual gates (model #3770)

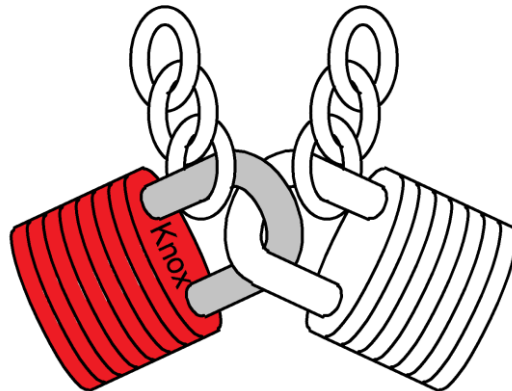
4. Key Switches for electronic gates (model #3501 & #3502)

**D. OVERRIDE SWITCHES.** A Knox™ Key Switch is required on all electronic gates within the city limits which restrict access to a site and/or restrict access to a fire apparatus access road. It is the only Knox™ equipment allowed on electronic gates. They operate similar to any other type of electronic switch. This device allows CSFD to keep the gate in the open position for other responding emergency vehicles accessing the site, and thus reducing response times.

**E. Padlocks.** In many situations, it is critical to restrict access across a driveway or roadway; however, these areas must also remain accessible to CSFD in case of an emergency. A Knox™ Padlock is required where a chain or manual gate is being utilized in this manner.

1. Shackle size – please verify the shackle size and that the links on the chain are large enough to allow the padlock shackle to pass through.
2. Utilizing two padlocks – A standard lock and one manufactured by the Knox™ Company can be hooked together as indicated on the diagram below. This will allow access for both the owner and the Fire Department personnel.

**Approved Padlock Installation**



**F. OPTIONAL KNOX™ EQUIPMENT.**

**Knox Cabinet.** Facilities such as independent senior living or assisted living facilities may have a need or desire to store multiple keys or facility documents in the Knox Box. For these situations, Knox™ Company makes a Knox™ cabinet. This is a dual-lock cabinet in which CSFD and the facility management both have access to the box through independent locking assemblies. The dual-lock design allows businesses to update keys or documents as needed without fire department assistance.



### III. ORDERING KNOX™ EQUIPMENT.

Again, all Knox™ products shall be ordered directly through the Division of the Fire Marshal. Payment shall accompany the order form.

Equipment is delivered directly to the indicated delivery address. Upon receipt, the ordering party is responsible for mounting the equipment according to the mounting instructions provided by Knox™ and the installation guidelines contained in this document.

Equipment needed for a construction project shall be ordered through Construction Services, 719-385-7352 or [fireconstructionservices@springsgov.com](mailto:fireconstructionservices@springsgov.com).

Equipment for an existing business shall be ordered through the Division of the Fire Marshal, 719-385-5978

- A. **DECALS.** Additional decals shall be ordered as needed for additional exterior doors. One complimentary decal is provided with your order.
- B. **SIZE OF BOX.** Be sure you order a box that will accommodate all the keys necessary for your building. See Section Five of this document for the required contents.

### IV. LOCATION OF KNOX™ BOX.

A. **INSTALLATION OF THE KNOX™ EQUIPMENT.** All Knox™ equipment shall be mounted at a location approved by CSFD (normally adjacent to the main entrance) such that it is clearly visible and unobstructed, in accordance with the manufacturer's instructions. To discourage vandalism, all models shall be installed between eight (8) and twelve (12) feet above grade, with the exception of padlocks and electronic key switches.

#### 1. Surface Mount Knox™ Box.

- a. Always mount your Knox™ Box to a secure, solid wall, beam or post.
- b. Mount the Knox™ Box with the green mounting pointers pointed up so the small moisture drain hole is on the bottom. Remove green markers after installation.
- c. Use at least four (4) Grade 5 or Grade 8 fasteners (carriage bolts, etc.) of 3/8" diameter. Boxes may also be welded into place. Mounting to solid beams or steel supports is best. Mounting face down from ceiling or overhang will not be allowed as this may cause contents to jam the lock.
- d. For proper weatherproofing, apply silicone caulk to the back of the box across the top and down each side. Leave the bottom open for drainage.

## 2. Recessed Mount Knox Box.

- a. A Knox™ Recessed Mounting Kit (RMK) is recommended for all recessed installations (available from Knox Company)
- b. The RMK should be installed in a concrete or masonry wall during construction.

## 3. Electronic Key Switches.

The override switch shall be installed on the gate keypad or on a pedestal at a height that is easily accessible to the responding emergency personnel (a minimum of 5-6 feet in height). The switch shall NOT be installed in any location that is obstructed or can be hidden from plain view.

CSFD will not approve the installation of or install keys in boxes that don't follow the manufacturer's mounting instructions.

You may coordinate with your fire inspector for the best location if you have any questions.

## B. MARKING THE BUILDING.

The Division of the Fire Marshal requires a window decal on each exterior access door to alert firefighters that a rapid entry system is provided. One is included when the Knox™ Box is shipped, therefore, additional decals, based on the total number of exterior doors, need to be added to the order.

## V. LOCKING KNOX™ EQUIPMENT.

Lockup of Knox™ equipment is coordinated and completed by Fire Department personnel. Once the box is installed and the required keys have been labeled and prepared to be placed in the box, contact the Division of the Fire Marshal or Construction Services to coordinate a time for the final lockup.

## A. REQUIRED CONTENTS.

Two (2) sets of labeled keys shall be provided for installation within the Knox™ Box. Each set shall be on key rings to keep them together. Due to limited space and possible impact to the box's operation, keys shall be limited to six (6) to ten (10) depending on their size (master keying is highly recommended). The keys shall provide access to:



1. All exterior entry doors.
2. All interior common areas of the building.
3. Rooms with fire detection and/or fire suppression control equipment. Example: Fire alarm control panels and fire sprinkler valves.
4. Fire protection equipment.
5. In structures equipped with elevators, one for each elevator car.
6. When electronic locks are employed in any portion of a building, two copies of the appropriate codes and/or electronic key-cards. Where electronic keys require occasional charging or syncing, a dual-lock Knox™ Cabinet will be required.