

STANDARD 506 KNOX RAPID ENTRY SYSTEM

The information contained in this standard is provided solely for the convenience of the reader and was being enforced by the Ventura County Fire Protection District at the time of its publication. The District reserves the right to make changes and improvements to this standard as and when required by law, or otherwise, at any time. The District's current standards will be posted and made available for downloading by the public at the following web site: www.vcfd.org.

Please note that the District assumes no liability for any damages incurred directly or indirectly as a result of any errors, omissions, or discrepancies between this standard and any applicable law. It is the sole responsibility of the person or persons conducting any work pursuant to this standard to ensure their work complies with any and all applicable codes, ordinances, and regulations.

Supersedes: VCFPD Standard 14.6.12

CHAPTER 1 – ADMINISTRATION

- **1.1 Purpose.** This standard is prepared for the use and guidance of those installing a Knox Rapid Entry System device on gates and/or buildings to provide emergency access by authorized personnel.
- **1.2 Scope.** This standard provides the minimum requirements for installation and use of the Knox Rapid Entry System devices.
- **1.3 Applicability.** This standard shall apply to all Knox devices installed within the jurisdictional boundaries of the Ventura County Fire Protection District.
- **1.4 Permits.** No permit is required for the installation and/or use of a Knox Rapid Entry System device. A permit and/or zoning clearance may be required for the construction of vehicle access gates. Vehicle access gates constructed across required Fire Apparatus Access Roads shall be in compliance with VCFPD Standard 501. Contact the local Building and Safety and/or Planning Departments for additional information.

CHAPTER 2 – DEFINITIONS

Common Area. A common area is an area of a facility or property with common access by a group of people which may at times be secured by a lock. Secured common areas may include property controlled by a vehicle access gate, lobbies, corridors, stairways of buildings and equipment rooms. Access to elevator emergency controls, fire detection equipment and fire suppression equipment are considered common areas. Individual dwelling units, guest rooms, tenant spaces and offices are not considered common areas.

Knox Box. A lock box used for securely storing the keys to a gate, building or rooms within a building.

Knox Cabinet. A locked data cabinet used for storing information pertinent to the operation of a building, such as Hazmat data and plant shut-down procedures. Keys to the facility can also be located within the cabinet.

Knox Company. The manufacturer/vendor of Knox boxes, cabinets, key switches, padlocks and related accessories. This is the only company whose products can be accessed by the Ventura County Fire Protection District.

Knox Key. A key carried on all Ventura County Fire Protection District (VCFPD) apparatus which enables fire crews to access any Knox device within VCFPD jurisdiction.

Knox Key Switch. An electrical switch activated by a Knox key which opens a gate, garage door or other electric entry door.

Knox Padlock. A padlock operable by a Knox key.

CHAPTER 3 – GENERAL REQUIREMENTS

- **3.1 General.** The Fire Code Official is authorized under the current adopted edition of the Ventura County Fire (VCFC) to require an approved key box, or similar device, to be installed where access to or within a structure or an area is restricted or where immediate access is necessary for life-saving or firefighting purposes. The Ventura County Fire Protection District utilizes the Knox Company's Rapid Entry System, which is specifically designed for fire departments. The type of device and installation location shall comply with this standard.
- **3.1.1 Where Required.** An approved device shall be provided on all commercial structures where access to fire protection equipment controls are interior to the structure; on all commercial structures with interior standpipes; all facilities that use, store or manufacture on-site hazardous materials above the exempt amounts provided in the current adopted edition of the VCFC; high-hazard structures as determined by the fire code official; and on all gates across required fire apparatus access roads. Knox devices that provide interior access to private residences are not authorized for use within the Fire District's jurisdictional boundaries.
- **3.1.2 Retroactivity.** Existing facilities subject to these requirements that currently do not have an approved device installed and operational shall have the same installed as soon as practical, but no later than 30 days after receiving notification from the Fire Code Official.
- **3.1.3 Gated Fire Apparatus Access.** When a gate is installed across a required fire apparatus access road, such gate shall be constructed in accordance with Ventura County Fire Protection District Standard 501.
- **3.2 Ordering Device.** Knox devices are ordered directly from the Knox Company. Devices approved for use within the Fire District are shown in Exhibit A. Orders may be placed online at www.knoxbox.com or by completing an authorization order form, which is available at the Fire Prevention Counter. All orders will require the Fire District's approval prior to the order being

processed. The ordered device(s) shall be shipped to the project location or other designated location of your choice. Orders shall not be shipped to the Fire District.

- **3.3 Installing Device.** The Knox device will arrive ready for installation. All devices will require a Fire District representative to lock/test the device once installed. Once all devices have been installed, contact your local fire station to schedule an inspection. During the inspection, the local engine company will verify the requirements of this standard are met and lock/test the device(s). Electrically controlled doors/gates with a key switch will require power in order to test the key switch.
- **3.3.1 Determining Your Local Station.** To determine your local fire station, go to the Fire District's web site at http://www.vcfd.org and click on "Knox Rapid Entry System" under the Fire Prevention tab. Follow the on-screen directions to find your local fire station.

CHAPTER 4 – KNOX BOX

- **4.1 General.** The Knox boxes listed in Exhibit A of this standard are the only types approved for use within VCFPD jurisdiction. Knox boxes are not authorized for use on private residences within the Fire District's jurisdictional boundaries. Residential type boxes shall not be used on commercial buildings.
- **4.2 Installation.** Approved Knox boxes shall be installed per the manufacturer's recommendations and in accordance with all VCFPD requirements.
- **4.2.1 Mounting Location.** Knox boxes shall be installed on the wall of the building within 10 feet of the main entrance to the building and any exterior accessed fire protection room (i.e. fire sprinkler riser room, electrical room containing the fire alarm panel, etc.). Additional key boxes may be desired by the owner/occupant and/or required by the Fire District. The location of these additional key boxes shall be approved by the Fire Code Official prior to installation.
- **4.2.2 Mounting Height.** Knox boxes shall be installed so that the top of the box is located at least 5 feet and no higher than 7 feet from the finished grade.
- **4.2.3 Accessibility.** Knox boxes shall be installed in such a manner as to be clearly visible and free from any obstructions by landscaping or architectural elements.
- **4.2.4 Mounting Deviations.** Deviations from the mounting requirements shall be approved by the Fire Code Official prior to installation.
- **4.3 Knox Box Contents.** Every key placed in a Knox box shall be legibly identified as to its use with a sturdy tag. Each set of keys shall be grouped together on a key ring.
- **4.3.1 Required Keys.** Necessary keys provided by the building owner or occupant may include:
 - (1) Main entrance door
 - (2) Exterior accessed fire protection/electrical rooms
 - (3) Fire alarm control panel/manual pull stations

- (4) Fire sprinkler control padlocks
- (5) Elevator control
- (6) Attic or roof access
- (7) Any other keys necessary to access building controls
- **4.3.2 Key Maintenance.** The building owner and/or occupant shall notify the Fire District whenever a building has been re-keyed so that obsolete keys in the box can be replaced. The building owner and/or occupant shall also ensure the Knox Box is maintained in an operable condition. If the box is non-operational, it shall be repaired and/or replaced immediately.
- **4.3.3 Inspections.** During fire safety inspections, VCFPD personnel will verify the key box location. Personnel may open the box, with the appropriate building/business owner representative in attendance, to verify the keys are properly labeled and operate the locks as indicated.
- **4.4 Knox Box Monitoring.** Where boxes contain keys to individual tenant spaces, the building shall be monitored by a burglar alarm system. The box may have an optional tamper switch installed and be monitored directly by the burglar alarm system. The tamper switch is not permitted to be tied into a fire alarm control panel.

CHAPTER 5 – KNOX KEY SWITCH

- **5.1 General.** A Knox key switch is required on all electrically operated gates across required fire apparatus access roads. The Knox key switches listed in Exhibit A of this standard are the only types approved for use within VCFPD jurisdiction.
- **5.2 Installation.** Approved Knox key switches shall be installed per the manufacturer's recommendations and in accordance with all VCFPD requirements.
- **5.2.1 Mounting Location.** Knox key switches shall be installed on the gate control keypad or on the right-hand side gate column. See Exhibit B.
- **5.2.2 Mounting Height.** For key switches installed on gate columns, the switch shall be installed between 5 feet and 7 feet from finished grade.
- **5.2.3 Accessibility.** Knox key switches shall be installed in such a manner as to be clearly visible and free from any obstructions by landscaping or architectural elements.
- **5.3 Operation.** Upon actuation of the Knox key switch, the gate shall open completely. The gate shall remain in the open position until the key switch is returned to the normal operating position by the Fire District.
- **5.4 Key Switch Maintenance.** The property owner and/or Homeowner's Association (HOA) shall ensure the Knox key switch is maintained in an operable condition. If the switch is non-operational, it shall be repaired and/or replaced immediately.

CHAPTER 6 – KNOX PADLOCK

- **6.1 General.** A Knox padlock is required on all manually operated gates across a required fire apparatus access road. The Knox padlocks listed in Exhibit A of this standard are the only types approved for use within VCFPD jurisdiction.
- **6.2 Installation.** Approved Knox padlocks shall be installed per the manufacturer's recommendations and in accordance with all VCFPD requirements.
- **6.2.1 Use of Multiple Padlocks.** Where multiple padlocks are used on a single gate, the padlocks shall be daisy-chained together. This will allow access for the property owner, Fire District personnel and any other parties authorized to access the property. See Exhibit C.

CHAPTER 7 – KNOX CABINET

- **7.1 General.** A Knox cabinet is required on all hazardous buildings and specialty occupancies identified by the Fire Code Official. The Knox cabinets listed in Exhibit A of this standard are the only types approved for use within VCFPD jurisdiction.
- **7.2 Installation.** Approved Knox cabinet shall be installed per the manufacturer's recommendations and in accordance with all VCFPD requirements.
- **7.2.1 Mounting Location.** Knox cabinets shall be installed on the wall within proximity of the front main doors. Alternative locations may be approved by the Fire District (i.e. constantly attended security offices, control rooms, etc.)
- **7.2.2 Mounting Heights.** Knox cabinets shall be mounted so that the top of the cabinet is no higher than 6 feet from the finished grade.
- **7.2.3 Accessibility.** Knox cabinets shall be installed in such a manner as to be clearly visible and free from any obstructions.
- **7.3 Knox Cabinet Contents.** Knox cabinets shall contain all the following:
 - (1) Material safety data sheet (MSDS) for all products in use at the facility
 - (2) Emergency contact information for the facility
 - (3) Required access keys not contained with a Knox key box located at the main facility entrance. Keys shall be labeled in accordance with Chapter 4 of this standard.
- **7.3.1 Key Maintenance.** The building owner and/or occupant shall notify the Fire District whenever facility information has been updated or a building has been re-keyed so that obsolete data/keys in the cabinet can be replaced. The building owner and/or occupant shall also ensure the Knox Cabinet is maintained in an operable condition. If the cabinet is non-operational, it shall be repaired and/or replaced immediately.

7.4 Knox Cabinet Monitoring. Where cabinets contain keys to individual tenant spaces, the building shall be monitored by a burglar alarm system. The cabinet may have an optional tamper switch installed and be monitored directly by the burglar alarm system. The tampered switch is not permitted to be tied into a fire alarm control panel.

EXHIBIT A

Approved Knox Rapid Entry System Devices Ventura County Fire Protection District

Knox Boxes

Knox Box - Model 3261 and 3262



Surfaced mounted with hinged door. Model 3262 is equipped with a tamper switch. Holds up to 10 keys.

Knox Box - Model 3270 and 3271



Recessed mounted with hinged door. Model 3271 is equipped with a tamper switch. Holds up to 10 keys.

Key Switches

Knox Key Switch - Model 3501 and 3517



Model 3501 is a two position (key removable in ON and OFF positions) electric override key switch. Model 3517 is a double pole/double throw switch allowing two operations with one electrical switch.

Knox Key Switch – Model 3502 and 3513



Model 3502is a two position (key removable in ON and OFF positions) electric override key switch. Model 3513 is a double pole/double throw switch allowing two operations with one electrical switch.

Padlocks

Knox Padlock Model 3770 - Exterior all conditions



Model 3770 has a 7/16 in. diameter stainless steel shackle with 1-13/16 in. clearance

Knox Padlock Model 3772 - Exterior shrouded



Model 3772 has a 7/16 in. diameter stainless steel shackle with 3/4 in. clearance. Shrouded shackle resists pry and cut attacks for added security.

Cabinets

Knox Cabinet Model 1302 and 1304



Surface mounted with a single lock and a 5 or 7 inch depth. Model 1304 is equipped with a tamper switch.

Part 1303/1304 – Single lock/ 5 or 7 inch depth/Tamper switch included

EXHIBIT B

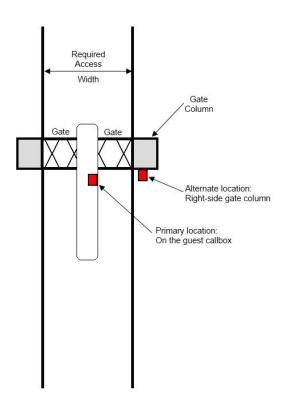
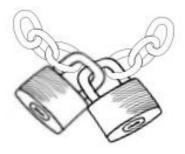


EXHIBIT C



Example of Daisy-Chaining Padlocks