

### FD Specification #04 Knox<sup>®</sup> Rapid Entry System

2018 IFC § 506

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#### OVERVIEW

When access to a structure or area is impeded due to secured openings or where immediate access is necessary for life saving or firefighting purposes, the Fire Marshal (FM) is authorized to require a rapid entry system Knox<sup>®</sup> product in an accessible location. However, Knox<sup>®</sup> products may also be installed voluntarily where authorized by the LHCFD.

Knox<sup>®</sup> products must be of a type approved by the FM and, where applicable, contain keys to gain property access as required. Locations and installation of barriers requiring a Knox<sup>®</sup> product for securing vehicular and pedestrian access gates must be approved by the FM.

### PURPOSE

To provide the end user with information needed on how to obtain, install, and maintain Knox<sup>®</sup> Box Rapid Entry System product(s).

# SCOPE

This specification covers the minimum requirements of the Lake Havasu City Fire Department (LHCFD), for the acquisition, installation, and maintenance of all Knox<sup>®</sup> related equipment and devices, to provide fire personnel rapid access through pedestrian or vehicular security gates and into buildings.

# DEFINITIONS

- 1. <u>Knox<sup>®</sup> Box</u> A secure device, manufactured by The Knox<sup>®</sup> Company with a lock operable only by a fire department master key, containing building entry keys and other keys and information that may be required for rapid access in an emergency.
- Knox<sup>®</sup> Cabinet A secure device for allowing firefighters immediate access to vital hazardous materials data. Interior master keys, entry cards, floor plans, shut off valve locations, and evacuation procedures are also available in one safe place when a Knox<sup>®</sup> Cabinet is on site. Cabinets are usually mounted on the exterior of a building.
- 3. <u>Knox<sup>®</sup> Gate Switch</u> A key switch that is normally mounted on an exterior electric security gate that will allow rapid access by the fire department by use of a master key.
- 4. <u>Knox® Padlock</u> This product is normally used in conjunction with an owner's lock on manual operating gates. This lock will allow access by the fire department and still allow access by the owner and must be secured to accommodate both accesses.
- 5. <u>Knox<sup>®</sup> Product</u> Devices including lock boxes, key switches, cabinets, and padlocks.
- 6. <u>Knox<sup>®</sup> Vault</u> A device similar to, and larger than, a Knox<sup>®</sup> Box and has the capacity to hold up to 50 keys.

7. <u>Residential Dwelling Units</u> Includes, but may not be limited to, single-family residences, apartment units and condominium units.

# REQUIREMENTS

- 1. The following list outlines when a Knox<sup>®</sup> Box Rapid Entry System product will be required:
  - a. Where a building poses unusual life hazards.
  - b. Where access to a building or area is unduly restricted for security reasons.
  - c. Where access to fire protection features is delayed (e.g., fire alarm panels and sprinkler risers & valves).
- 2. Examples of facilities which require installations include:
  - a. Large residential and commercial facilities with secured gates along fire department access roads.
  - b. Hazardous materials storage, handling, and use facilities.
  - c. Fire suppression control valves located inside of buildings.
  - d. Fire alarm equipment rooms.
  - e. Electrical or power distribution rooms.
  - f. Locations where recurring alarms are received for fire alarms or medical aids.

# PROCEDURES

#### **Knox<sup>®</sup> Product Installation Guidelines**

- 1. Obtain authorization to purchase a Knox<sup>®</sup> product directly from the Knox<sup>®</sup> Company, via the internet at <u>www.knoxbox.com</u> or call (623) 687-2300 or (800) 552-5569 to apply for and order your product(s).
- 2. The applicant will receive ordered product(s) through the mail system. Once received, the property owner or end user is responsible for the installation of all Knox<sup>®</sup> products.
- 3. Once a Knox<sup>®</sup> product is obtained and installed, contact the Lake Havasu City Fire Prevention Bureau by calling (928) 855-1141 to schedule a meeting to insert your key(s) into the Knox<sup>®</sup> Box or to have the device secured in place (e.g., padlocks).
- 4. Residential Knox<sup>®</sup> Boxes <u>may</u> be provided by the LHCFD to qualified residents and must be returned when the box is no longer needed. Contact the LHCFD for details by calling (928) 855-1141.

#### **Knox<sup>®</sup> Key Boxes on Buildings**

- 1. Attaching Knox<sup>®</sup> boxes to buildings for emergency Fire Department building access is recommended and may be required by the FM.
- 2. Knox<sup>®</sup> boxes are to be mounted on the exterior of the building at a nominal height of <u>5 feet</u> <u>and 6 inches</u> above the finished floor and within three feet of the main access point <u>or</u> other approved location. The key box shall be mounted to the right side of the elevator bank.

3. After the Knox<sup>®</sup> box has been installed, the building owner must contact the Fire Prevention Bureau to install and secure the building keys. Additionally, the owner may be asked to supply emergency contacts, phone numbers, and any other pertinent information, which may assist emergency response units.

### Key Boxes for Non-standardized Fire Service Elevator Keys

Where installed, shall comply with IFC § 506.1 and all of the following:

1. The key box shall be compatible with an existing rapid entry key box system in use in Lake Havasu City and *approved* by the *fire code official*.

2. The front cover shall be permanently labeled with the words "Fire Department Use Only— Elevator Keys."

3. The key box shall be mounted at each elevator bank at the lobby nearest to the lowest level of fire department access.

4. The key box shall be mounted <u>5 feet 6 inches</u> above the finished floor to the right side of the elevator bank.

5. Contents of the key box are limited to fire service elevator keys. Additional elevator access tools, keys and information pertinent to emergency planning or elevator access shall be permitted where authorized by the *fire code official*.

6. In buildings with two or more elevator banks, a single key box shall be permitted to be used where such elevator banks are separated by not more than 30 feet. Additional key boxes shall be provided for each individual elevator or elevator bank separated by more than 30 feet.

**Exception:** A single key box shall be permitted to be located adjacent to a *fire command center* or the nonstandard fire service elevator key shall be permitted to be secured in a key box used for other purposes and located in accordance with Section 506.1.

# **Knox<sup>®</sup> Gate Key Switches on Electronic Gates**

- 1. Knox<sup>®</sup> gate key switches must be installed by a qualified electrician, or person(s) with sufficient electrical knowledge, to safely install the key switch per the standards of the <u>International Electrical Code</u>.
- 2. A means to operate the electrically operated gate, from the interior side, either by a sensor which opens the rolling gate upon approach or by the use of a Knox key switch located adjacent to the gate in an approved location, must be provided for immediate egress.

# **Knox<sup>®</sup> Products and Requirements for Manual Gates**

- 1. May not have chain links larger than <sup>1</sup>/<sub>4</sub> inch in diameter. To gain emergency access, the Fire Department will utilize bolt cutters and cut the chain on chained gates, *OR*
- 2. A Knox<sup>®</sup> padlock for emergency responder use may be used on chained gates with no restriction on chain link size, *OR*
- 3. A Knox<sup>®</sup> box may be provided, adjacent to the gate, to secure gate keys for emergency responders with no restriction on chain link size.
- 4. A Knox<sup>®</sup> box is **required** if cylindrical dead bolt locks are utilized on manual gates. Knox boxes must be located adjacent to the main entrance or in other locations approved by the FM. The nominal height of Knox<sup>®</sup> box installations must be **5 feet above grade**.
- 5. All vehicle and pedestrian access gates, including pool gates on R-1 and R-2 occupancies and others required by the FM, must be keyed to permit personnel rapid emergency access.

#### **RESPONSIBILITIES & MAINTENANCE**

- 1. At any time key locks are changed or rekeyed to any access areas, the owner/operator is responsible for contacting the fire department to change the keys in the Knox<sup>®</sup> box, or other Knox<sup>®</sup> product, for those areas or units.
- 2. Knox<sup>®</sup> products should be kept clean.
- 3. Knox<sup>®</sup> products must remain unobscured and visible to emergency responders at all times.

#### REFERENCES

- 1. 2018 International Fire Code Ch. 5, § 506 Key Boxes.
- 2. The Knox<sup>®</sup> Company, 1601 W. Deer Valley Rd., Phoenix, AZ 85027. View products at: <u>www.knoxbox.com</u> / (623) 687-2300 or (800) 552-5569
- **Note**: This FD Specification is intended to be a guide only. For full installation, fire-flow, location and distribution, and maintenance requirements, refer to the references above. Where conflicts exist between these documents and the applicable codes and standards, the above references must supersede.

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**APPROVED:** 

Scott Hartman, Fire Marshal

DATE: <u>9/1/2021</u>