

## Huntington Beach Fire Department

### Fire Access for Pedestrian or Vehicular Security Gates & Buildings

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 Code Official is authorized to require a rapid entry system Knox® product in an accessible location.

Knox products include lock boxes, key switches, vaults, and padlocks. Knox products shall be of a type approved by the Fire Code Official and, where applicable, contain keys to gain property access as required. Locations and installation of barriers requiring a Knox product for securing vehicular and pedestrian access gates must be approved by the Fire Department.

#### GENERAL REQUIREMENTS

##### 1. PLANS

- 1.1 **Permit Requirements** – Obtain required permits from the Fire Department, Planning Department, and Building and Safety Department.
- 1.2 **Site Plans** – Site plans must be submitted to the Planning Department and Fire Department for approval.
- 1.3 **Vehicle Access Width (Exhibit 1)** – Fire Department apparatus access width shall be unobstructed and not less than 24 feet wide.
  - Fire access streets, drives or roads adjacent to building fronts in commercial centers shall not be less than 26 feet wide.
  - Planning Department designated “Residential Small-Lot Developments” may utilize fire apparatus access roads with an unobstructed drive width of not less than 20 feet wide in-lieu of the standard 24 feet per *City Specification #401, Minimum Standards for Fire Apparatus Access*. Vehicle gates shall preserve the full 20 feet drive width.
  - The fire access width shall be measured with the gate in the fully open position from whichever point protrudes furthest into the access width to the same point on the opposite side (e.g., edge of gate to curb, curb-to-curb, curb to fence post, etc.).
- 1.4 **Multiple Travel Lanes with Vehicle Security Gates or Obstructions (Exhibit 1)** Each lane shall not be less than 14 feet in width. Vehicle security gates shall provide a minimum of a 30 feet approach and a 30 feet departure, for a total of 60 feet in a straight line.

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- Approach or departure shall be measured from the gate or significant incoming/outgoing obstructions, such as a guard office structure, planters, landscape features, callbox/keypad posts, or other obstructions.
  - As the opening width increases, the approach and departure dimensions may be decreased at the discretion of the Fire Code Official.
- 1.5 **Vehicle Access Height** – Fire Department apparatus access height shall not have a vertical clearance less than 13 feet 6 inches unobstructed. An exception may be approved by the Fire Code Official for reduction in the minimum vertical clearance, provided such a reduction does not impair fire apparatus access, and approved signs are installed and maintained indicating the established vertical clearance.
- 1.6 **Exiting Spikes** – Exiting spikes, if installed, shall be clearly noted on submitted plans. One way exiting spikes must be approved by the Fire Code Official before installation.
2. **GATES AND GATE ARMS (Exhibit 1)**
- 2.1 **Manual Gates with Chains and Padlocks**
- May not have chain links larger than ¼ inch in diameter. To gain emergency access, the Fire Department will utilize bolt cutters and cut the chain on chained gates, **OR**
  - A Knox padlock for emergency responder use may be used on chained gates with no restriction on chain link size, **OR**
  - A Knox box may be provided to secure gate keys for emergency responders with no restriction on chain link size.
    - A Knox box is **required** if cylindrical, keyed dead bolt locks are utilized on manual gates. Knox boxes shall be located adjacent to the main entrance gate or in other locations approved by the Fire Code Official. The nominal height of Knox box installations shall be **5 feet above grade**.
  - All vehicle and pedestrian access gates in R-1 (hotel, motel) or R-2 (multi-family housing such as apartments) occupancies and others required by the Fire Code Official, shall be sub-mastered to permit law enforcement personnel emergency access.
  - Gates surrounding pools at R-1 or R-2 occupancies shall have at least one gate with a Knox box. The gate with the Knox box shall be the primary entry for first responders as determined by the Fire Code official. If the gated area has multiple main entries, the Fire Code official may require more than one gate to have a Knox access.

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- Multi-family residential occupancies with shared interior corridors shall be dual keyed and sub-mastered to permit law enforcement personnel to access the common areas of the building.

**2.2 Electrically Operated Gates**

- **Commercial Property Electrically Operated Gates** – Knox gate switches are required (see Gate Control). Strobe switches are **NOT** required, unless determined necessary by the Fire Code Official. .
- **Residential Electrically Operated Gates** – A strobe switch shall be appropriately mounted to open the gate system by Opticom emitters mounted on emergency response apparatus.
  - **Flash Cycle** – Opticom receivers must be set to receive at 840 flashes per minute.
  - **Delay** – Opticom operated gates must have a minimum 2 minute delay before closing is activated.
  - **Height** – The minimum receiver height above finish grade shall be 8 feet.

The fire department is not responsible for the purchase or maintenance of strobe switches.

- **Gate Controls** – Shall be operable by an approved emergency override Knox key switch, which is an integral part of the mechanism.
  - In the event of a power failure, the gate shall be automatically transferred to a fail-safe mode, allowing the gate to be pushed open without the use of special knowledge or any equipment. If a two-gate system is used, the override switch must open both gates.
  - Remote control are not approved to be used in lieu of a Knox key switch.
- **Exiting** – If there is no sensing device that will automatically open the gates for exiting, a Knox electrical override switch shall be placed on each side of the gate in approved locations.

**2.3 Electric Gate Arms Securing Parking Lots and Parking Structures**

- Gate arms securing parking lots and parking structures shall be equipped with a dual-keyed and sub-mastered Knox electrical override key switch. When activated, the arm or arms open to allow Fire Department and Police Department access.

**3. BUILDINGS**

**Knox Boxes** – Attaching Knox boxes to buildings for emergency Fire Department building access is recommended and may be required by the Fire Code Official. Knox boxes shall be required for all buildings equipped with a fire alarm system and all high-risk

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occupancies, as determined by the Fire Code Official. The Police Department sub-master key requirement is not mandated. Exceptions for requiring PD sub-mastering may be made by the Fire Code Official. The nominal height of Knox box installations shall be **5 feet above grade**.

**4. PROCEDURE FOR ORDERING KNOX PRODUCTS**

- 4.1 **Applications** – Orders for Knox products shall be submitted through [www.knoxbox.com](http://www.knoxbox.com).
- 4.2 **Sub-mastering Requirements for Knox Products** – Sub-mastering Knox products is recommended for businesses with burglar alarms and is required for the following situations:
- Electric gate key switches, padlocks and lock boxes for accessing properties shall be sub-mastered for law enforcement access.
  - Multi-family residential occupancies with shared interior corridors shall be sub-mastered to permit law enforcement personnel to access the common areas of the building.
- 4.3 **Knox Product Information** – For information about Knox products, contact the Knox Company at (800) 552-5669 or at [www.knoxbox.com](http://www.knoxbox.com). The Fire Department is not responsible for cost of purchase or maintenance for required Knox products.

**5. INSPECTION**

- 5.1 Once the Knox product has been installed, the facility representative shall contact the Fire Department for an inspection.
- A Fire Department representative will schedule an appointment with the property representative where the Knox product is installed to insert keys into the Knox box, vault, padlock or to test a Knox key switch.
  - Prior to final inspection, electronic gates shall remain in a **locked open** position.
  - A final field inspection by the Fire Code Official is required before electronic Knox controlled gates may become operative.
- 5.2 The Fire Department is not responsible for installing Knox products.

APPROVED: \_\_\_\_\_

  
Scott Haberle, Fire Chief

DATE: \_\_\_\_\_

9.6.22

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EXHIBIT 1

