



CHAPTER FIVE

Knox Boxes/Key Switches

Contents:

- Knox Box Location and Installation Guide
- Knox Boxes
- Key Switches
- Padlocks

Purpose:

Proper location of lock boxes and key switches enables emergency responders to gain entry into secured buildings. This reduces or eliminates damage done to property and also reduces response times.



FIRE DEPARTMENT KNOX BOX GUIDE FOR COMMERCIAL PROPERTIES

GENERAL NOTES FOR COMMERCIAL PROPERTIES

- All Knox Boxes are required to be installed no more than five (5) feet above finished floor **and located on the left side of the entrance, as approved.**
- A **KNOX BOX 3200** series is required at any remote riser room exterior door **located on the left side of the entrance, as approved.**
- **KNOX BOX 3200 series - Recess Mounted**
 - #3270 - 3275 Recessed model
- **KNOX BOX 4400 series (Hinged Door Only)**
 - #4400 Recessed model – 4430, 4431, 4439, 4440, 4443, 4444, 4445, 4446
- **KNOX PADLOCK MAIN GATES 3750 series**
 - #3753 Exterior – All Weather Conditions
 - Authorized Knox Box order forms are available Monday – Friday at Fire Prevention, 14250 W. Statler Plaza, Suite 101 or Community Development, 12425 W. Bell Road from 8:00 AM – 5:00 PM.

BIG BOX BUILDINGS

Example: Home Depot, WalMart, etc.

- A **#3200 Series** Knox Box is required at main and rear entry doors. Additional Knox Box may be required at other entry doors of the building.

STRIP CENTERS

(Single story, multi-suite exterior, access)

- A **#3200 Series** Knox Box is required at main and rear entry doors. Additional Knox Boxes may be required at other entry doors of the building.
- Each tenant is required to provide and maintain the correct key to their tenant space in the Knox Box.



(Fire Department Knox Box Guide Continued)

ALL COMMERCIAL BUILDINGS

(Free standing)

- A **KNOX BOX #3200 Series** is required at the main entry door of the building. More than one Knox Box may be required at other entry doors.
- Each tenant within a building is required to provide and maintain the correct key to the main entrance to their tenant space, in the Knox Box.
- An additional **#3200 Series** Knox Box may be required at the rear door of the building.

SPECIAL HAZARD OCCUPANCY

- Any occupancy containing a hazardous operation, condition or materials must contact a Fire Inspector at 623-222-5100 for the number and placement of Knox Boxes.

OTHER APPLICATIONS

- **Magnetic Locks** – when access points are secured with magnetic locks, a **KNOX KEY SWITCH #3502** is required in conjunction with the above noted requirements. The key switch is to be located two (2) to four (4) inches below the lock box.
- **Pedestrian Gates** – primary access points that have pedestrian gates require Fire Department access. This access may be provided with a **KNOX KEY SWITCH #3502** or **Knox Box 3200 Series (Hinged Door)** if manual gate.
- A **Knox Key Switch #3502** is required on all electronically locked gates.

NOTICE!!

This is intended to be used as a guide. Due to variations of Fire Department access needs, from property to property, it is required that a Fire Inspector inspects and approves all Knox Box and key switch locations.



Knox-Box® 3200 Series
HINGED DOOR MODEL

High Security Industrial/Government Key Box

Recessed Mount
with Face Flange



The number one high-security KNOX-BOX® is used for most commercial applications including businesses, schools, government and public buildings, community associations and apartment complexes. The 3200 Series KNOX-BOX holds keys, access cards and other small items necessary for emergency access.

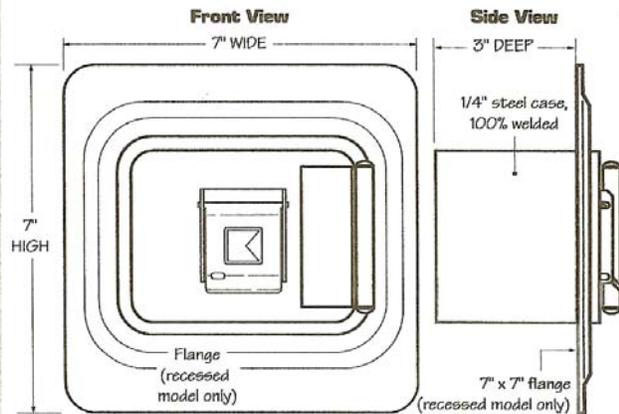
The hinged-door 3200 Series KNOX-BOX is more convenient than the lift-off door version because it allows single-handed operation and opened or closed, it's all one unit.

Features and Benefits

- Holds up to 10 keys or 1 access card in interior compartment
- Ensures high security. Box and lock are UL® Listed
- Includes a Knox-Coat® proprietary finishing process that protects Knox products up to four times better than standard powder coat
- Resists moist conditions with a weather resistant door gasket
- Hinged door allows single-handed operation
- Colors: Black, Dark Bronze or Aluminum
Weight: Surface mount - 8 lbs.
Recessed mount - 9 lbs.

Options

- Alarm tamper switches (UL Listed)
- Additional rust and corrosion protection (Aluminization)
- Recessed Mounting Kit (RMK) for recessed models only
- Inside switch for use on electrical doors, gates and other electrical equipment



3200 Recessed Mount

Ordering Specifications

To insure procurement and delivery of the 3200 Series KNOX-BOX, it is suggested that the following specification paragraph be used:

KNOX-BOX surface/recessed mount with hinged door, with/without UL Listed tamper switches. 1/4" plate steel housing, 1/2" thick steel door with interior gasket seal and stainless steel door hinge. Box and lock UL Listed. Lock has 1/8" thick stainless steel dust cover with tamper seal mounting capability.

Exterior Dimensions: Surface mount body- 4"H x 5"W x 3 1/4"D
Recessed mount flange- 7"H x 7"W

Lock: UL Listed. Double-action rotating tumblers and hardened steel pins accessed by a biased cut key.

Finish: Knox-Coat® proprietary finishing process

Colors: Black, Dark Bronze or Aluminum

P/N: 3200 Series KNOX-BOX (mfr's cat. ID)

Mfr's Name: **KNOX COMPANY**

MOUNTING INSTRUCTIONS
KNOX-BOX® 3200 Series with Hinged Door



Read instructions carefully before mounting.

The 3200 Series KNOX-BOX® is a heavy-duty, high-security key box that stores keys, access cards and other small items. Each key box is coated with the Knox-Coat® proprietary finishing process* and includes a 1/8" thick stainless steel dust cover to protect the lock. For maximum security, mount the unit properly in an area sheltered from excessive moisture.

All 3200 Series Knox-Boxes are fully tested and listed by Underwriters Laboratories as anti-theft devices. Alarm tamper switches are UL listed as Central Station Alarm Units. UL Electrical Range: Max Voltage of 24 VDC at 50 mA.

Surface Mounted Models

Surface models are designed for mounting on a flat wall. Do not mount face down from ceiling or overhang area. When the surface mounted KNOX-BOX includes tamper switches, install the tamper switch assembly after the box is mounted and check to see that the "box to wall" tamper plunger is properly depressed. A qualified alarm installer should perform alarm wiring, testing and adjusting.

Recess Mounted Models

Recess models are designed for flush mounting. Do not mount face down from ceiling or overhang area. Units can be adapted to fit a variety of solid walls cored to a 6" diameter approximately 3 1/2" deep. A Recessed Mounting Kit (RMK) is for new concrete or masonry walls under construction. Do not over tighten mounting bolts as this will distort the flange.

When the recess mounted KNOX-BOX includes a door tamper switch, install the tamper switch assembly after the box is mounted. Pull wiring tight so that any attempts to force the box out of the wall will break the wire or pull the terminals loose. A qualified alarm installer should perform alarm wiring, testing and adjusting.

If installing the box on a thin or hollow wall, use a solid backing (like 3/8" steel plate fastened to solid studs on both sides) for secure mounting. Mounting to solid beams or steel support is best. Use of a professional installer is highly recommended.

General Mounting Instructions

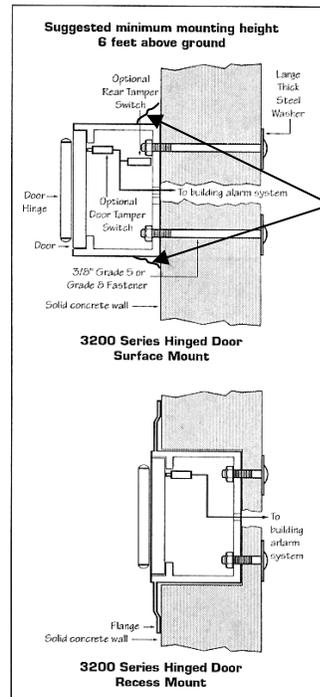
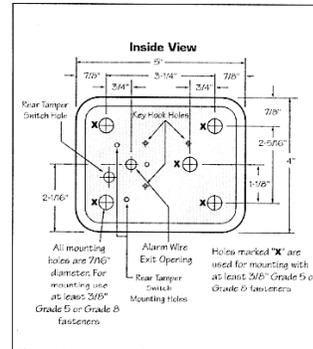
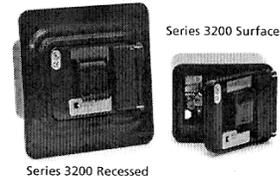
1. For units with tamper switches, remove the tamper switch assembly and set aside for installation after the box is mounted.
2. Always mount your KNOX-BOX to a secure, solid wall, beam or post. A six foot height level is recommended to resist vandalism.
3. Use a small level to plumb the box square.
4. Mount the KNOX-BOX with the green mounting markers pointed up so the small moisture drain hole is on the bottom. Remove green markers after installation.
5. Use at least four (4) Grade 5 or Grade 8 fasteners (carriage bolts, etc.) of 3/8" diameter. Units may also be welded into place. Mounting to solid beams or steel supports is best. Mounting face down from ceiling or overhang area may cause contents to jam lock.
6. For proper weatherproofing, caulk the back of box across top and down each side. Leave the bottom open for drainage.
7. Use of a professional locksmith or alarm products installer is highly recommended.

CAUTION! Be extremely careful when handling this KNOX-BOX prior to installation. When not mounted, the door will be OPEN. Always hold box and door securely to prevent door closing on fingers and causing injury.

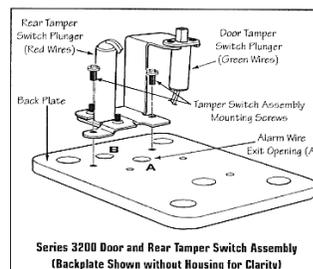
Box Lock Up

When your KNOX-BOX is for fire department use, contact your local fire department after installation to inform them that the box is ready for lock up. They have the only key.

For private, industrial or commercial use: keys will be sent separately to address requested.



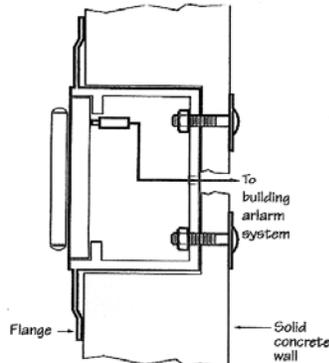
Welded



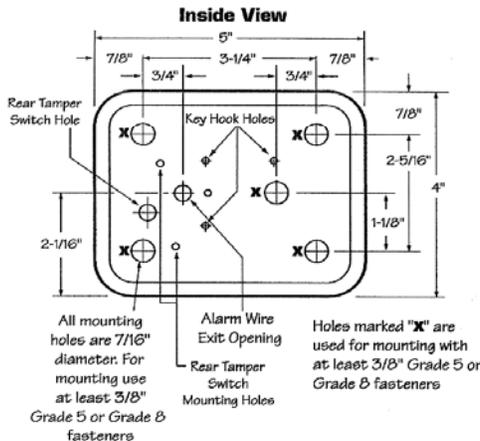


Knox-Box® 3200 Series
 HINGED DOOR MODEL - MOUNTING DIAGRAM

**Suggested minimum mounting height
 6 feet above ground**



**3200 Series Hinged Door
 Recess Mount**



All mounting holes are 7/16" diameter. For mounting use at least 3/8" Grade 5 or Grade 8 fasteners

Holes marked "X" are used for mounting with at least 3/8" Grade 5 or Grade 8 fasteners

Attention: KNOX-BOX® is a very strong device that MUST be mounted properly to ensure maximum security and resist physical attack.

Knox® Rapid Entry System

The Knox Company manufactures a complete line of high security products including Knox-Box key boxes, key vaults, cabinets, key switches, padlocks, locking FDC caps, plugs and electronic master key security systems. For more information or technical assistance, please call Customer Service at 1-800-552-5669.

Recessed Mounting Kit

The 3200 Recessed Mounting Kit (RMK) is used for recessed models only. It contains a shell housing and mounting hardware to be cast-in-place in new concrete or masonry construction. After construction is completed, the KNOX-BOX mounts inside the RMK. The RMK may only be used in new concrete or masonry construction.

Installation In Cast Concrete

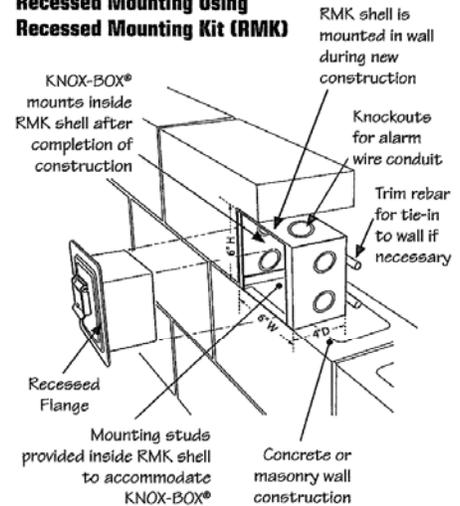
The optional Recessed Mounting Kit is for use in new concrete or masonry construction only. The kit includes a shell housing and mounting hardware to be cast-in-place. The KNOX-BOX is mounted into the shell housing after construction is completed.

Dimensions

Rough-in Dimensions: 6-1/2"H x 6-1/2"W x 5"D

IMPORTANT: Care should be taken to insure that the front of the RMK shell housing, including the cover plate and screw heads, is flush with the finish wall. The RMK must be plumbed to insure vertical alignment of the vault.

**Recessed Mounting Using
 Recessed Mounting Kit (RMK)**





Knox-Vault® 4400 Series
SINGLE LOCK MODEL

High Security Industrial/Government Key Vault



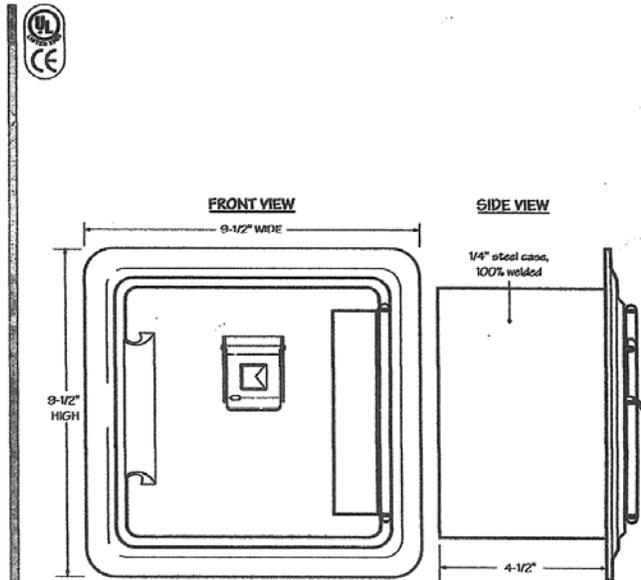
Knox-Vault™ key boxes are used in larger businesses, industrial properties, public buildings and universities. The heavy-duty, high security 4400 Series Knox-Vault protects and stores building keys, access cards and floor plans for emergency entry. The vault also provides secure storage for other internal and external applications.

Features and Benefits

- Holds up to 50 keys in the large interior compartment
- Ensures high security with UL® Listed Medeco lock(s)
- Includes Knox-Coat® that is four times better than standard powder coat
- Resists moist conditions with a weather resistant door gasket
- Colors: Black, Dark Bronze or Aluminum
- Weight: Surface mount - 28 lbs.
Recessed mount - 29 lbs.

Options

- Alarm tamper switches (UL Listed)
- Additional rust and corrosion protection (Aluminization)
- Recessed Mounting Kit (RMK) for recessed models only
- Custom vault depth available
- Dual lock configuration
- Inside switch for use on electrical doors, gates and other electrical equipment



4400 Recessed Mount

Ordering Specifications

To insure procurement and delivery of the 4400 Series Knox-Vault, it is suggested that the following specification paragraph be used:

KNOX-VAULT surface/recessed mount, with/without UL Listed tamper switches. 1/4" plate steel housing, 5/8" thick steel door with interior gasket seal and stainless steel hinge. Vault and lock UL Listed. Lock has 1/8" thick stainless steel dust cover with tamper seal mounting capability. Vault has anti-theft re-locking mechanism with drill resistant hard-plate lock protector.

Exterior Dimensions: Surface mount - 7"H x 7"W x 5"D

Recessed mount flange - 9 1/2"H x 9 1/2"W

Lock: UL Listed. Double-action rotating tumblers and hardened steel pins accessed by a biased cut key.

Finish: Knox-Coat® proprietary finishing process
Finish Color - Black, Dark Bronze or Aluminum

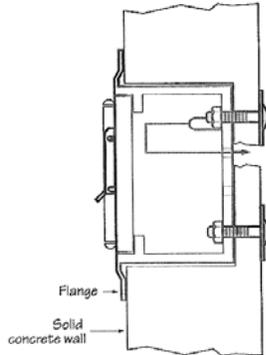
P/N: 4400 Series Knox-Vault (mfr's cat. ID)

Mfr's Name: **KNOX COMPANY**

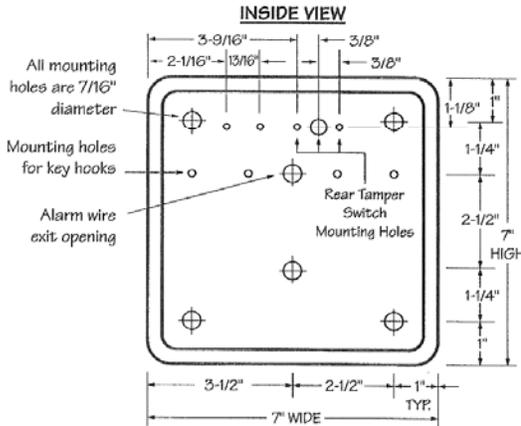


Knox-Vault™ 4400 Series
 SINGLE LOCK MODEL - MOUNTING DIAGRAM

**Suggested minimum mounting height
 6 feet above ground**



Series 4400 Recessed Mount



Attention: KNOX-VAULT™ is a very strong device that MUST be mounted properly to ensure maximum security and resist physical attack.

Knox® Rapid Entry System

The Knox Company manufactures a complete line of high security products including Knox-Box key boxes, key vaults, cabinets, key switches, padlocks, locking FDC caps, plugs and electronic master key security systems. For more information or technical assistance, please call Customer Service at 1-800-552-5669.

Recessed Mounting Kit

The 4400 Recessed Mounting Kit (RMK) is used for recessed models only. It contains a shell housing and mounting hardware to be cast-in-place in new concrete or masonry construction. After construction is completed, the Knox-Vault mounts inside the recessed shell housing. The RMK may only be used in new concrete or masonry construction.

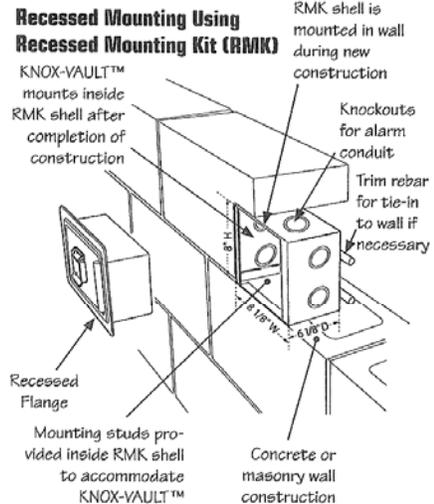
Installation In Cast Concrete

The optional Recessed Mounting Kit is for use in new concrete or masonry construction only. The kit includes a shell housing and mounting hardware to be cast-in-place. The KNOX-VAULT is mounted into the shell housing after construction is completed.

Rough-In Dimensions

8 1/2"H x 8 1/2"W x 7"D

IMPORTANT: Care should be taken to insure that the front of the RMK shell housing, including the cover plate and screw heads, is flush with the finish wall. The RMK must be plumbed to insure vertical alignment of the vault.





Knox® Padlocks

Fire/Law Enforcement Rapid Entry System

Exterior Padlock Features and Benefits

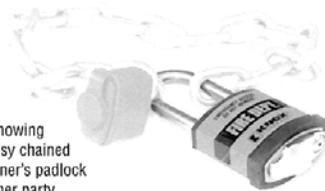
Knox® Padlocks are operated with the same Knox Master Key used for other Knox Rapid Entry System devices. The exterior, heavy duty Knox Padlock (Model 3753) with a stainless steel shackle, is designed for securing perimeter or fire access gates, industrial equipment yards and residential storage areas.

- Rust free, all-weather stainless steel shackle
- Heavy-duty lock design and solid brass body resists pull attacks
- EPDM rubber seal and body cover protects padlocks from harsh weather condition and outdoor sprinkler systems
- Medeco® cylinder has a UL 437 rating not offered by most padlock manufacturers
- Choice of ID label (Fire/red, EMS/white, Police/blue, Sheriff/gold, Security/white)

Interior Padlock Features and Benefits

The Knox interior padlock (Model 3771) is designed to secure fire sprinkler control systems, hazardous chemical supplies, restricted utility areas and equipment lockers. The UL® listed padlock resists pull attacks.

- Hardened steel shackle; 5/16" diameter shackle fits on a wider range of interior hasps
- Heavy-duty lock design and steel body resists pull attacks• Medeco cylinder has a UL 437 rating not offered by most padlock manufacturers
- Choice of ID label (Fire/red, EMS/white, Police/blue, Sheriff/gold, Security/white)



Typical application showing the Knox padlock daisy chained with the property owner's padlock allowing entry by either party.

Knox® Rapid Entry System

The Knox Company manufactures a complete line of high security products including Knox-Box key boxes, key vaults, cabinets, key switches, padlocks, locking FDC caps, plugs and electronic master key security systems. For more information or technical assistance, please call Customer Service at 1-800-552-5669.



Ordering Specifications

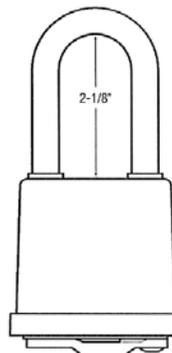
To ensure procurement and delivery of the Knox® Exterior and Interior Padlocks, it is suggested that the following specification paragraph be used:

EXTERIOR Model 3753

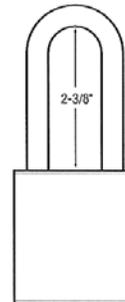
Padlock: Heavy-duty UL Listed cylinder.
 Lock: Double-action rotating tumblers and hardened steel pins accessed by a biased cut key.
 Finish: Solid brass body and cylinder with EPDM rubber seal and body cover and stainless steel shackle.
 P/N: Knox Padlock 3753
 Mfr's Name: **KNOX COMPANY**

INTERIOR Model 3771

Padlock: Heavy-duty UL Listed cylinder.
 Lock: Double-action rotating tumblers and hardened steel pins accessed by a biased cut key.
 Finish: Hardened steel body and shackle with a brass cylinder.
 P/N: Knox Padlock 3771
 Mfr's Name: **KNOX COMPANY**



Model 3753
 5-1/8"H x 2-1/2"W x 1-3/8"D
 3/8" diameter shackle



Model 3771
 5"H x 2-1/16"W x 1-3/16"D
 5/16" diameter shackle

BIG BOX RETAIL BUILDING



NOTES:

1. A Knox Box is required to be located to the left of the main entry.
2. All Knox Boxes are required to be installed at five (5) feet above finish floor.
3. The final location and number of Fire Department Knox Boxes will be determined by the Fire Department Plan Examiner.

SHOPPING STRIP CENTERS



NOTES:

1. A Knox Box is required to be located to the left of the main entry.
2. Additional Knox Boxes may be required at all remote exterior doors.
3. All Knox boxes are required to be installed at five (5) feet above finish floor.
4. The final location and number of Fire Department Knox Boxes will be determined by the Fire Department Plan Examiner.

SMALL COMMERCIAL BUILDINGS



NOTES:

1. A 3200 Series Knox Box is required to be located to the left of the main entry.
2. A 3200 Series Knox Box is required at all remote Riser Room exterior doors.
3. All Knox Boxes are required to be installed five (5) feet above the finish floor.
4. The final location and number of Fire Department Knox Boxes will be determined by the Fire Department Plan Examiner.

HIGH RISE BUILDINGS



NOTES:

1. 4400 Series Knox Box is required to be located to the left of the main entry. More Knox Boxes may be required at other access points.
2. All Knox Boxes are required to be installed five (5) feet above the finish floor.
3. The final location and number of Fire Department Knox Boxes will be determined by the Fire Department Plan Examiner.

KNOX BOX PLACEMENT FOR PEDESTRIAN GATES



NOTES:

1. Primary access points that have pedestrian gates require Fire Department access. This access may be provided with a 3200 Hinged Door Series Knox Box or a 3500 Series Key Switch model # 3502.
2. The final location and number of Fire Department Knox Boxes will be determined by the Fire Department Plan Examiner.