

NOTES/INSTRUCTIONS

1. A separate electronic lock permit is required for each building/space that has a valid Certificate of Occupancy (C/O).
2. Submit complete floor plans digitally through the ProjectDox portal.
3. One permit is required for each floor if a C/O was issued for a building with multiple floors.
EXCEPTION: Elocks being permitted under a C/O for the building CORE may contain up to 5 floors on one permit (e.g. locks on stairway doors).
4. Elocks within privately leased or inaccessible spaces that are not part of the contract or the commonly shared egress system are not required to be shown on the plans.
5. As a measure against tampering with stamped and approved plans, handwritten notations, correction fluid, and/or taped-on notations on the printed plans will not be accepted by the inspector. Although no items can be added to the approved plans, electronic locks on doors can be eliminated from the plans on site by the inspector if the lock equipment is not installed at time of inspection.
6. Submitted elock plans will be reviewed for all of the applicable code provisions within 1 to 3 weeks after submittal. Expediting is available upon request once the after-hours fee is paid for the review. Based on the availability of the reviewers, expediting is usually completed within 1 to 2 days and may apply to all review: initial submittals, re-submittals, and revisions.

PLAN REQUIREMENTS











<input type="checkbox"/>	Plan Size. Plans shall be submitted electronically and printed for inspection using 30" X 42" sized sheets with a 1/2" clear border.
<input type="checkbox"/>	Scaling. Identify the scaling size used. Plans shall be to scale, and the scale shall be suitably large and legible enough for the inspectors to view when printed. 1/16" scale is only allowed in order to comply with the requirement to show the entire floor that the locks are being installed on. Door/elock details are required to be shown on separate sheets or using call-outs with a minimum size of 3/16" scaling.
<input type="checkbox"/>	Building Info. The title block (or other designated area) on the plans shall include: <ul style="list-style-type: none"> • The address of the location where the elocks are being installed: this shall be the same address as the one listed on the permit and on the valid Certificate of Occupancy (C/O) associated with the space. • The total square footage of the suite or floor where the elocks are being permitted (Scope of Work). • The total number of floors in the building as well as a list of all the re-entry floors if in a high-rise building. • The sprinkler system status of the space or floor: 100% Sprinklered or Non-sprinklered.
<input type="checkbox"/>	Device Details. The title block (or other designated area) on the plans shall include: <p>Legend. A device legend or hardware schedule that includes a symbol legend, the make and model of each device, and a theory of operation for each device (see example legend). Each electronic lock shall be specified as either fail safe or fail secure.</p> <p>Theory. A "theory of operation" or narrative description of electronic locking and releasing sequences. If it is simple enough, the theory of operation may be incorporated into the Hardware Schedule (see example Hardware Schedule). Electronic locking devices that contain operations more complicated than the most common installations must have sequences that are explained in detail. Manufacturers' sales sheets that explain nothing more than the features and benefits of the device will not be accepted in those cases.</p> <p>Signage. Show all required signs in their appropriate locations (see example drawing). Required signs include the following:</p> <ol style="list-style-type: none"> #1. "PUSH TO EXIT" adjacent to a push button deactivating device. (Sec. 1008.1.9.8 of the 2012 IBC). #2. "THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED" posted on the egress side or adjacent to doors equipped with key-operated locking devices on the egress side of the door(s). The sign shall be in letters 1 inch high on a contrasting background. (Sec. 1008.1.9.3 of the 2012 IBC). #3. "PUSH/PULL TO RELEASE DOOR IN AN EMERGENCY" adjacent to a manual fire alarm box or a push button (minimum of 1.5 inch in size) when located in elevator lobbies (City of Houston Amendments). The sign shall comply with the visual character requirements in ICC A117.1. #4. "PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 SECONDS" located on the door above and within 12 inches of the release device for a delayed egress lock (Sec. 1008.1.9.5 #5 of the 2012 IBC.)

PLAN REQUIREMENTS	
<input type="checkbox"/>	<p>Floor Plan. Plans shall include the complete floor plan with all walls, doors, room names, elevator lobbies, and proposed/existing exit signs delineating the paths of egress travel to the stairways or exits. First floor plans shall include the exit discharges and the access to a public way or exterior area of refuge. All plans will be reviewed and inspected for means of egress code compliance, not just the installation of electronic locks.</p>
<input type="checkbox"/>	<p>Furniture Layer. Plans shall include a furniture layer, if available. Furniture layers can be essential in determining occupant loads, assembly areas, minimum egress widths, and required locking hardware.</p>
<input type="checkbox"/>	<p>Door Numbering. Provide each door with an identifying number in a call-out circle (see example drawing). No two numbers on any given floor or within a space should ever be duplicated. The accepted method of naming or identifying doors is with a basic number (such as 1, 2, 4A, etc.) instead of a name, such as main entry door, break room door, etc.</p>
<input type="checkbox"/>	<p>Door Clouds. Plans shall show all new, existing, or relocated electronic locks. Pertinent symbols shall be clearly marked on the plan with "clouds" (see example drawing) so that the reviewer can verify that no combination of locked doors will block egress. A locking device is only considered "existing" if it was previously permitted & approved by the City of Houston and no changes to the door have been made since.</p> <ul style="list-style-type: none"> • Except for required stairway enclosure doors, free egress locks shall have the words "FREE EGRESS" written on the tag number line of the door call-out circles. • Existing permitted electronic locks shall be shown in "gray" or with embossed clouds as well as for electronic locks that are being installed by others or under separate permits. Provide the tag number for each existing electronic lock, or the original permit number for free egress locks that were not tagged, in each numbered door call-out, which must match our records. Otherwise, the locking devices will be treated as new.
<input type="checkbox"/>	<p>Symbol Location. Provide the location on the plans of all electronic lock components and required signage using symbols from the legend. The plans shall show each component and/or sign in its appropriate location on either the ingress side or egress side of the door (see example drawing). Security cameras and door contacts do not need to be shown and only clutter the plans.</p>
<input type="checkbox"/>	<p>Spec Sheet. Include the manufacturer's specification data, preferably all on one sheet of the same size as the floorplan sheet, along with the UL certification or other approved agency's certification for the following items:</p> <ul style="list-style-type: none"> • Mode of entry (card reader, key pad, etc.) • Type of lock with model number • Mode of egress (egress button, motion detector, exit bar, etc.) • All other components electronically connected to the locks (fire alarm pull stations, automatic door openers, intercom systems, hardwired remote release buttons or switches, etc.).
<input type="checkbox"/>	<p>Lock Notations. Each electronic lock shall be specified as either fail safe or fail secure. Except for stairway doors, free egress locks shall have the words "FREE EGRESS" written on the tag number line of the door number call-outs until a barcode system replaces the need for this. Doors that are not a part of a means of egress system shall be labeled as "NON-EGRESS".</p>
<input type="checkbox"/>	<p>One-line Diagram. Provide a one-line diagram of the electrical circuitry for each type of door/lock configuration showing the direction of in-line switches for all release devices and their associated components (see example diagram).</p>
<input type="checkbox"/>	<p>Declaration Statement. **New Requirement** The following statement shall be written on every floorplan: "DECLARATION STATEMENT: All wiring associated with all fail-safe electronic locking devices shall be installed in such a way that if the lock is controlled by a relay, removal of power from the relay shall also cause the lock to unlock/fail open, along with failure of the wiring or other device in the circuit to the lock."</p>

EXAMPLE

SYMBOL LEGEND AND HARDWARE SCHEDULE

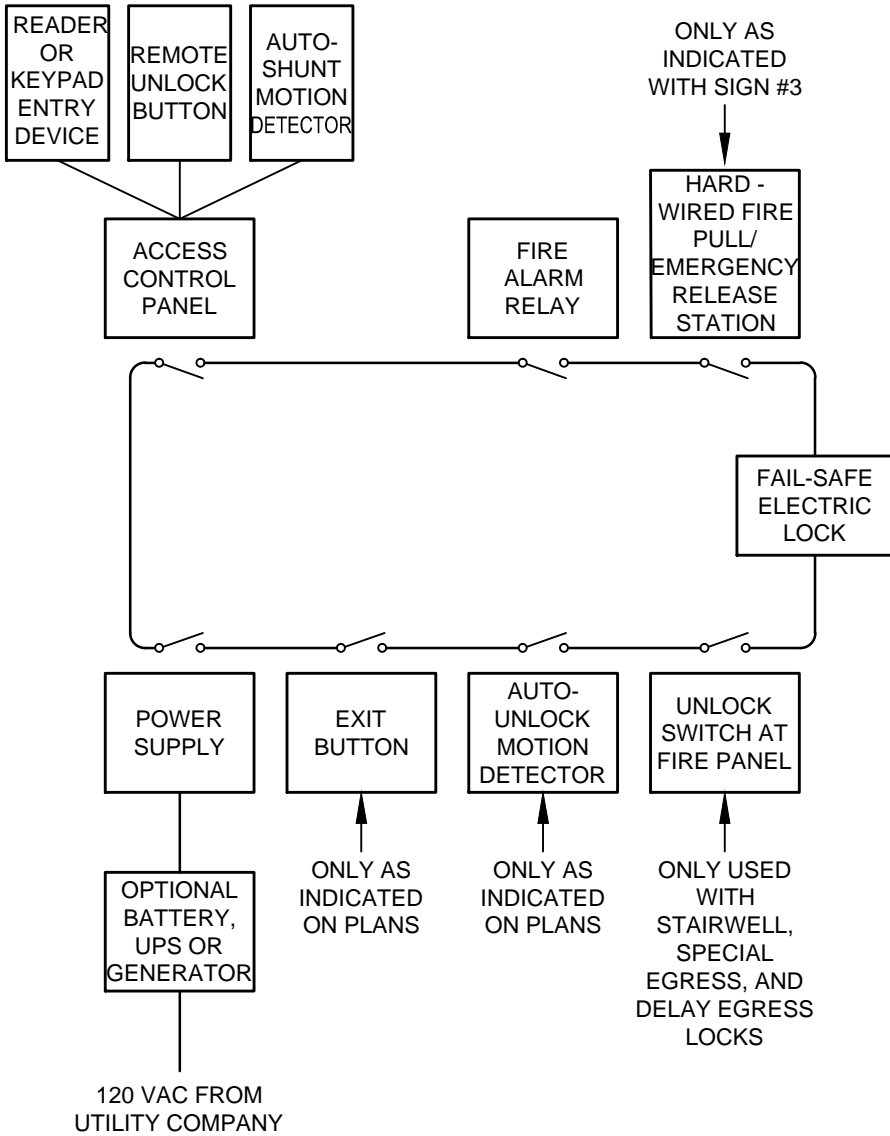
ELECTRIC LOCK SYMBOLS:

-  EXIT SIGN
-  FIRE PULL STATION - ACTIVATES FIRE ALARM SYSTEM
-  FIRE PULL STATION - ACTIVATES FIRE ALARM SYSTEM AND DIRECTLY DISENGAGES ELECTRIC LOCK (HARDWIRED TO ELECTRIC LOCK)
-  SMOKE DETECTOR
-  TWO-WAY COMMUNICATION DEVICE MONITORED 24/7 WITH UNLOCK SWITCH AT THE FIRE OR COMMAND CENTER. MONITORING COMPANY MUST HAVE THE CAPABILITY TO REMOTELY UNLOCK REENTRY DOOR.
-  SIGN #1 - READS: "PUSH TO EXIT" ADJACENT TO EXIT BUTTON. LETTERS WITH CONTRASTING BACKGROUND. LETTERS RAISED 1/32" UPPER CASE, 5/8" MINIMUM HEIGHT ON CONTRASTING BACKGROUND WITH GRADE 2 BRAILLE AS PER TEXAS ACCESSIBILITY STANDARDS (TAS)
-  SIGN #2 - READS: "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED" ADJACENT TO DOOR. CAPITAL LETTERS 1" INCH MINIMUM HEIGHT ON CONTRASTING BACKGROUND.
-  SIGN #3 - READS: "PUSH/PULL TO RELEASE DOOR IN AN EMERGENCY" ADJACENT TO PUSH BUTTON/FIRE PULL STATION. LETTERS RAISED 1/32" UPPER CASE, 5/8" MINIMUM HEIGHT ON CONTRASTING BACKGROUND WITH GRADE 2 BRAILLE AS PER TEXAS ACCESSIBILITY STANDARDS (TAS)
-  SIGN #4 - READS: "PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 SECONDS" WITHIN 12 INCHES OF RELEASE DEVICE. LETTERS RAISED 1/32" UPPER CASE, 5/8" MINIMUM HEIGHT ON CONTRASTING BACKGROUND WITH GRADE 2 BRAILLE AS PER TEXAS ACCESSIBILITY STANDARDS (TAS)
-  SIGN #5 PUSH/LIFT TO CALL FOR RE-ENTRY. LETTERS RAISED 1/32" UPPER CASE, 5/8" MINIMUM HEIGHT ON CONTRASTING BACKGROUND WITH GRADE 2 BRAILLE AS PER TEXAS ACCESSIBILITY STANDARDS (TAS)

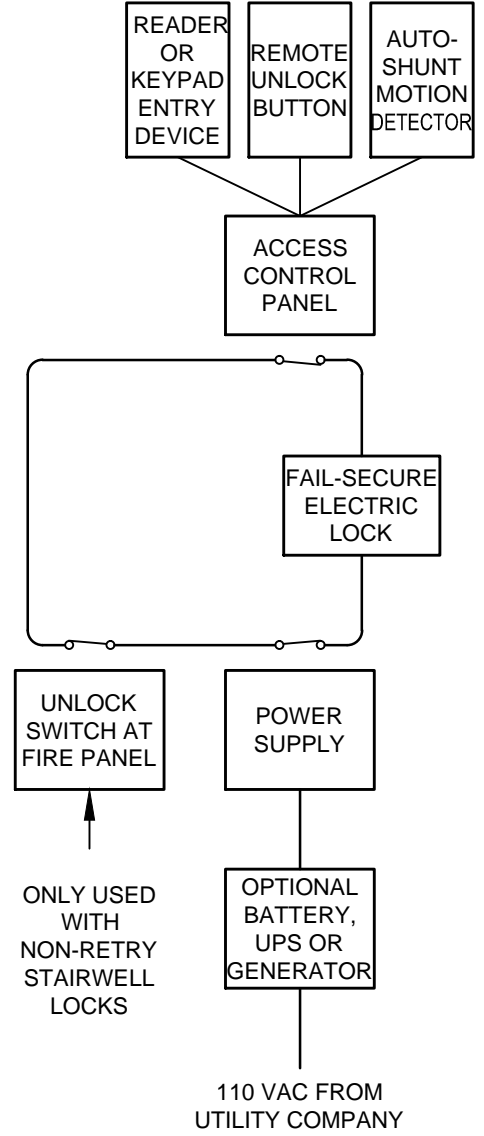
<u>DEVICE</u>	<u>MAKE</u>	<u>MODEL</u>	<u>THEORY OF OPERATION</u>
 CARD READER	HID	PROXIMITY	HOLD CARD IN FRONT OF READER TO DISENGAGE ELECTRIC LOCK(S).
 KEYPAD	IEI	232 SERIES	INPUT CODE IN KEYPAD TO DISENGAGE ELECTRIC LOCK.
 EXIT BUTTON	RCI	900 SERIES	PRESS BUTTON TO DISENGAGE ELECTRIC LOCK.
 AUTO-UNLOCK MOTION DETECTOR	BOSCH	DS150i	MOTION DETECTOR DISENGAGES ELECTRIC LOCK TO PROVIDE ONE MOTION EXIT.
 AUTO-SHUNT MOTION DETECTOR	BOSCH	DS150i	MOTION DETECTOR FOR ALARM SHUNT AND/OR AUTO-UNLOCK ONLY, NOT REQUIRED BY CODE.
 1 MAG LOCK	RCI	MODEL 8310/8320 FAILSAFE	LOCKS AND UNLOCKS DOOR WITH ENTRY OR EXIT DEVICE.
 2 ELECTRIC STRIKE	HES	MODEL 1006 FAILSAFE	LOCKS DOOR WITH ENTRY DEVICE. FREE MECHANICAL EXIT ALWAYS POSSIBLE.
 3 ELECTRIC MORTISE	SARGENT	MODEL 7800/8200 FAILSAFE	LOCKS DOOR WITH ENTRY DEVICE. FREE MECHANICAL EXIT ALWAYS POSSIBLE.
 4 DELAY EGRESS MAG LOCK	LOCKNETICS	MODEL 390DEL FAILSAFE	PUSH DOOR FOR 1 SECOND TO INITIATE IRREVERSIBLE RELEASE OF DELAY LOCK IN 15 SECONDS W/MANUAL RESET.
 5 ELECTRIC STRIKE	HES	MODEL 1006 FAILSECURE	LOCKS DOOR WITH ENTRY DEVICE. FREE MECHANICAL EXIT ALWAYS POSSIBLE.
 6 ELECTRIC MORTISE	SARGENT	MODEL 7800/8200 FAILSECURE	LOCKS DOOR WITH ENTRY DEVICE. FREE MECHANICAL EXIT ALWAYS POSSIBLE..
 EXIT BAR MICROSWITCH	VON DUPRIN	RX SERIES	PRESS BAR TO DISENGAGE ELECTRIC LOCK FOR ONE MOTION EXIT.

EXAMPLE

ONE-LINE DIAGRAMS



A FAILSAFE ELECTRIC LOCKS

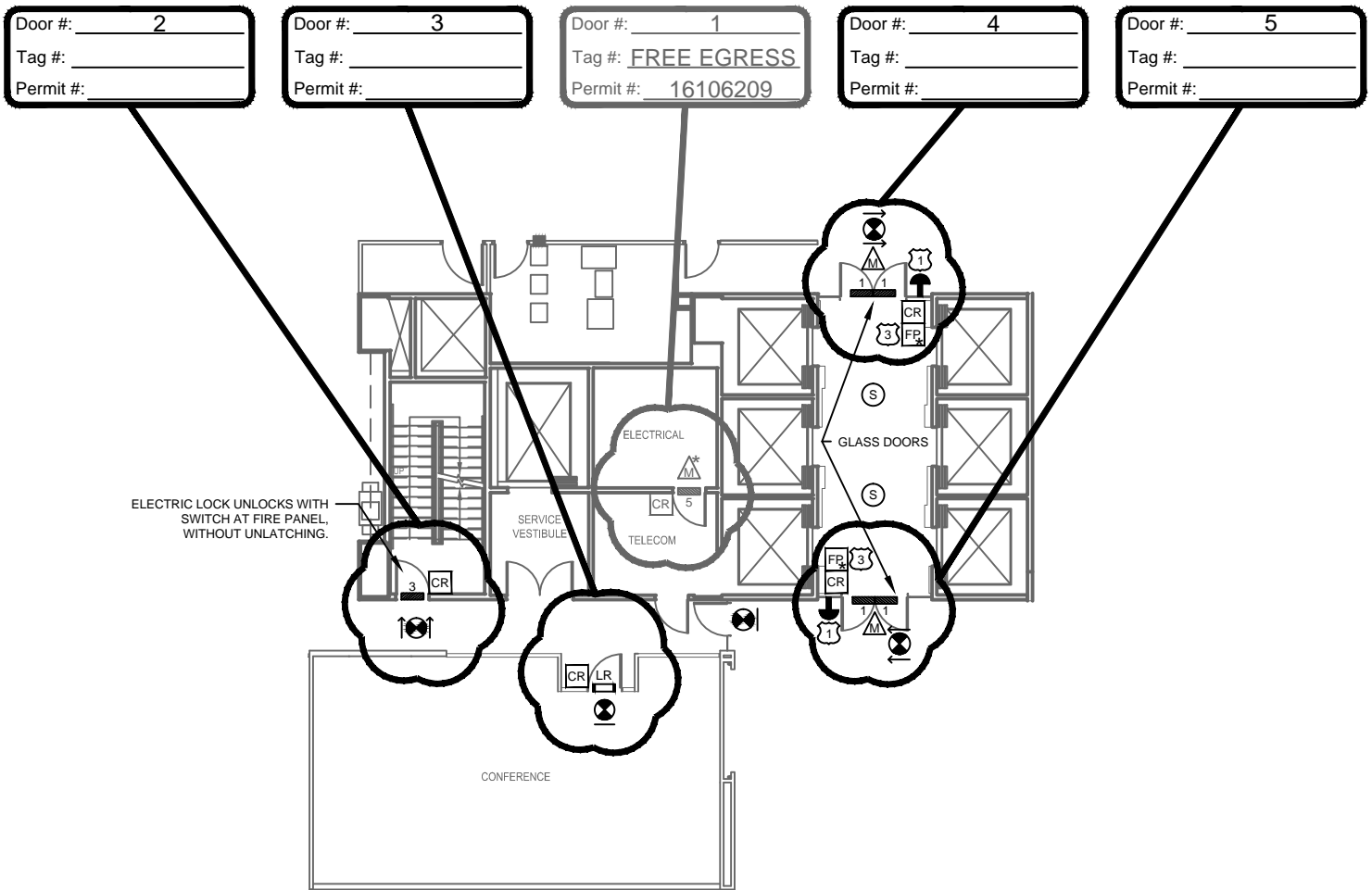


B FAILSECURE ELECTRIC LOCKS

ONE-LINE DIAGRAMS

EXAMPLE

ELECTRIC LOCK PLAN



NOTE:

The partial floor plan is for illustrative purposes only. All plans submitted for an electronic lock permit shall include the complete floor plan with all doors, room names, elevator lobbies and proposed and/or existing exit signs delineating the paths of egress travel to the stairways and exits.

29.00

41.00

3.45

6.90

PRETEST CHECKLIST

	UNLOCKS WITH FIRE PULL STATION	UNLOCKS WITH SMOKE DETECTOR	ELECTRIC LOCK SIGNAGE INSTALLED AS PLAN INDICATE
DOOR 1	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A
DOOR 2	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A
DOOR 3	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A
DOOR 4	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A
DOOR 5	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A
DOOR 6	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A
DOOR 7	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A	check one: <input type="checkbox"/> YES <input type="checkbox"/> N/A

- ELECTRIC LOCK SYMBOLS:**
- EXIT SIGN
 - FIRE PULL STATION - ACTIVATES FIRE ALARM SYSTEM
 - FIRE PULL STATION - ACTIVATES FIRE ALARM SYSTEM AND DIRECTLY DISENGAGES ELECTRIC LOCK (HARDWIRED TO ELECTRIC LOCK)
 - SMOKE DETECTOR
 - TWO-WAY COMMUNICATION DEVICE MONITORED BY WITH UNLOCK SMITTS AT THE FIRE OR COMMAND CENTER. MONITORING COMPANY MUST HAVE THE CAPABILITY TO REACHES UNLOCK REENTRY LOCK.
 - SIGN #1 - READS "PUSH TO EXIT" ADJACENT TO EXIT BUTTON. LETTERS WITH CONTRASTING BACKGROUND.
 - SIGN #2 - READS "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED" ADJACENT TO DOOR. CAPITAL LETTERS 1" HIGH MINIMUM HEIGHT ON CONTRASTING BACKGROUND.
 - SIGN #3 - READS "PUSH/PULL TO RELEASE DOOR IN AN EMERGENCY" ADJACENT TO PUSH BUTTON/FIRE PULL STATION. LETTERS MINIMUM 1/2" UPPER CASE, 9/16" MINIMUM HEIGHT ON CONTRASTING BACKGROUND WITH GRADE 2 BRAILLE AS PER TEXAS ACCESSIBILITY STANDARDS (TAB) OF THE ARCHITECTURAL BARRIERS ACT, ARTICLE 9102, TEXAS CIVIL STATUTES, EFFECTIVE APRIL 1, 1994.
 - SIGN #4 - READS "PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 SECONDS" WITHIN 12 INCHES OF RELEASE DEVICE.

DEVICE	MAKE	MODEL	THIRTY OF OPERATION
CARD READER	HID	PROXIMITY	HOLD CARD IN FRONT OF READER TO DISENGAGE ELECTRIC LOCKS
KEYPAD	REI	232 SERIES	INPUT CODE IN KEYPAD TO DISENGAGE ELECTRIC LOCK
EXIT BUTTON	HCI	800 SERIES	PRESSES BUTTON TO DISENGAGE ELECTRIC LOCK
AUTO-UNLOCK MOTION DETECTOR	BOSCH	DS150	MOTION DETECTOR DISENGAGES ELECTRIC LOCK TO PROVIDE ONE MOTION EXIT
AUTO-BREAK MOTION DETECTOR	BOSCH	DS150	MOTION DETECTOR FOR ALARM BURNIT AND/OR AUTO-UNLOCK ONLY. NOT REQUIRED BY CODE.
MAG LOCK	HCI	MODEL 8310R200	LOCKS AND UNLOCKS DOOR WITH FALLSAFE ENTRY OR EXIT DEVICE.
ELECTRIC STRIKE	HES	MODEL 1005	LOCKS DOOR WITH ENTRY DEVICE. FREE MECHANICAL EXIT ALWAYS POSSIBLE.
ELECTRIC MORTISE MAG LOCK	SARGENT	MODEL 7800R200	LOCKS DOOR WITH ENTRY DEVICE. FREE MECHANICAL EXIT ALWAYS POSSIBLE.
DELAY EDGES	LOCONETICS	MODEL 300EL	PUSH DOOR FOR 1 SECOND TO INITIATE IRREVERSIBLE RELEASE OF RELAY LOCK IN 15 SECONDS. MANUAL RESET.
ELECTRIC STRIKE	HES	MODEL 1006	LOCKS DOOR WITH ENTRY DEVICE. FREE MECHANICAL EXIT ALWAYS POSSIBLE.
ELECTRIC MORTISE	SARGENT	MODEL 7800R200	LOCKS DOOR WITH ENTRY DEVICE. FREE MECHANICAL EXIT ALWAYS POSSIBLE.
EXIT BAR MICROSWITCH	VON DUPRN	RX SERIES	PRESSES BAR TO DISENGAGE ELECTRIC LOCK FOR ONE MOTION EXIT.

BUILDING INFORMATION:

PLEASE SELECT AHJ

AHJ:

PROJECT NAME:

Tenant

Building Name

Address

Houston, TX 77???

SUITE ??? FLOOR ??

DRAWING DESCRIPTION:

ELECTRIC LOCK PERMIT DRAWING

DRAWING NUMBER: SEC-??

DRAWN BY: [Blank]

CUSTOMER REP.: [Blank]

DATE: 7/7/2018

