



ROUND ROCK FIRE DEPARTMENT

FIRE MARSHAL'S OFFICE

ELECTRONIC ACCESS CONTROL DOOR LOCK SYSTEMS GUIDELINES

This document is designed to provide guidance for plan submittal and installation of electronic access control door lock systems restricting or delaying exiting a premises within Round Rock Fire Dept.'s jurisdiction. In accordance with Section 1010.1.9 of the 2015 IBC, all exit doors must permit egress without the use of a key or any special knowledge. If an egress exit door is penetrating a fire rated wall, has electromagnetic locks, or contains any delayed egress, a plan submittal and permit is required. An exception is "free egress" doors that do not restrict egress without the use of key or special knowledge will not require a permit from the Round Rock Fire Marshal's Office. This information is not all-inclusive but is intended to inform contractors of local requirements and assist in developing a successful plan submittal. If any applicable item on this list is not included with submittal, the **design plan may be rejected and require re-submittal**.

PLAN SUBMITTAL PROCESS REQUIREMENTS:

- All files are to be submitted in through the <u>City of Round Rock Permit Portal.</u>
- \square A minimum permit fee of \$60.00 will be required after application for plans design is accepted.
- \Box After review by a fire inspector, the design plan will be stamped, and a permit issued.

SUBMITTAL ITEM REQUIREMENTS:

- Design Plan: electronic copy (PDF) of plan uploaded via the Permit Portal.
 - Floor Plan: A floor plan showing the location of the proposed locks.
 - <u>Plan Cover</u>: include project name, address & associated building permit numbers on floor plan
 - <u>Credentials</u>: plan includes equipment installer name, business address & contact information
 - <u>License</u>: provide individual or company license information of a Class B Security License with an "electronic endorsement" with Texas Department of Public Safety
 - **Equipment Specs**: provide electronic copy of manufacturer cut sheets for all door lock components, *including UL listing numbers clearly indicated on the sheets*. Note: All panic hardware is required to have a UL 305 listing. Delayed egress or electromagnetic locks panic hardware require a UL 294 listing.

SYSTEM PLAN DESIGN REQUIREMENTS:

- Symbol Legend: plan includes a symbols legend defining all system related symbols.
- Door Schedule: plan includes schedule with a door number/identifier & location of each door with an electronic lock, the fire rating of each door and the type of electric door lock for each door.
- **Equipment Specs**: digital equipment specifications (cut sheets or manual) for equipment used.
- **Operations Sequence**: plan includes a written sequence of operations explaining function of each type of electric door lock setup function i.e., is to be released during normal secured conditions, during

activation of the fire alarm system, when the building has lost power and when the electric locks are manually released from the fire control room (if applicable).

- □ **Fire Door Hardware Rating**: plan shows that all hardware installed on the electronic lock components match required fire door ratings and show UL 10A, 10B or 10C listing depending on the door.
- Electromagnetic Locked Doors: plan shows all the following six requirements: 2015 IBC 1010.1.9.9
 - Door hardware has an obvious method of operation under all light conditions.
 - Hardware capable of being operated with one hand.
 - Operation of hardware directly interrupts power to electromagnetic lock, unlocking immediately.
 - Loss of power to locking system automatically unlocks the door.
 - Where panic or fire exit hardware is required under 1010.1.10, operation of hardware releases lock.
 - o All locking system units shall be UL 294 listed.

Delayed Egress Door Lock: plan shows all the following eight requirements: 2015 IBC 1010.1.9.7

- Delayed egress locking system deactivates upon activation of sprinkler or fire alarm systems.
- o Delayed egress locking system deactivates upon loss of power controlling lock mechanism.
- o Delayed egress locking system shall have capability to deactivate at fire command center.
- Attempt to egress initiates irreversible process allowing egress in no more than 15 sec. when physical effort to exit is applied to egress side of door for no more than 3 sec. Process shall activate audible signal in vicinity of door. Rearming of delay locks is manual means only.
- Egress path shall not pass through more than one delayed egress locking system.
- Provide signage 12" or door exit hardware with verbiage: PUSH OR PULL UNTIL ALARM SOUNDS, DOOR CAN BE OPENED IN 15 [30] SECONDS.
- Emergency lighting shall be provided on the egress side of door.
- All delayed egress locking system units shall be UL 294 listed.

ACCEPTANCE TEST:

- □ **Plan Paper Copy**: provide minimum 11" X 17" paper copy of RRFD stamped plan for on-site inspection to verify installation to plan & place in FACP doc box or other approved location at the completion of inspection.
- <u>Function Test</u>: An acceptance inspection must be scheduled through the <u>City of Round Rock</u>
 <u>Permit Portal</u>. An inspector will witness:
 - o Release of all electronic locks on FACP activation
 - Test manual operation of panic hardware for one hand operation.
 - Loss of power deactivates and unlocks all doors for free egress.
 - Verify UL listings on hardware.
 - o Test time of delayed egress doors and verify proper signage (if applicable).
 - Perform visual inspection of the system to verify system is installed based on design.