



POLICY STATEMENT
OFFICE OF THE FIRE MARSHAL

TITLE: ACCESS-CONTROLLED EGRESS DOORS /SPECIAL LOCKING SYSTEMS

REFERENCE: 2012 International Fire Code, Section 1008

SCOPE: The City of Deer Park Fire Marshal's Office requires building permits for all special locking devices that utilize an electronic interface to allow egress. Examples of such locks are electromagnetic locks and electronic pin or plunger locks which use a push to exit button, touch sense bar, or micro-switch bar to release the locking system. Locksets that maintain a mechanic means of opening the door in the direction of ingress with free egress do not require a special locking permit. Examples would be electric strike, electrified mortise handsets, and high-tower locksets. An electrical permit may be required for these devices. All doors shall comply with section **1008.1.3.4 Access-controlled egress doors**, of the 2012 International Fire Code. Because access/egress control remains a function of life safety, the Building Official and Fire Marshal shall determine if life safety might be compromised and shall review all installations. If such installations are determined to be "nonconforming" or a possible threat to life safety, the proposed installation will not be permitted.

IBC 707.14.1 - Elevator lobbies shall have at least one means of egress provided such that the use of such exit or exit access doorway does not require keys, tools, special knowledge or effort.

DOORS REQUIRING PERMITS

Access-controlled egress doors.

The entrance doors in a means of egress in buildings with an occupancy in Group A, B, E, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in Groups A, B, E, M, R-1 and R-2 are permitted to be equipped with an approved entrance and egress access control system which shall be installed in accordance with all of the following criteria:

- 1) The building must be protected throughout by a monitored automatic fire sprinkler system with an approved smoke detector located on the egress side within 15 feet of the door OR for non-sprinklered buildings; an approved automatic smoke detection system is required in the path of egress.
- 2) Doors shall automatically unlock upon activation of the building automatic sprinkler or fire alarm system. The doors shall remain unlocked until the fire alarm system has been reset.
- 3) Doors shall automatically unlock in the event of primary power loss to the access control system.
- 4) Be capable of being deactivated by a signal from a switchboard located in an approved location such as a fire control room.
- 5) A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
- 6) Push to exit buttons shall not be less than two (2) inches in diameter, readily visible, and shall not be required to be held in for unlatching to occur. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches vertically above the floor and within 5 feet of the secured doors used for exiting and must be placed at the unhinged side of the door. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a red sign stating "PUSH TO EXIT". When operated, the manual unlocking device shall result in direct interruption of power to the lock – independent of the access control system electronics. The white letters of the sign shall be at least one (1) inch in height and shall have a stroke of not less than one-eighth (1/8) inch with a red background.

- 7) During normal operation, the door shall remain unlocked for a minimum of 30 seconds before relocking. The unlatching shall not require more than one (1) operation.
- 8) Entrance doors to Group A, B, E and M occupancies shall not be secured from the egress side during the periods where the building is open to the general public.

Card readers, code keypads or similar devices may not be used to unlock a door in the direction of egress.

Delayed egress locks.

Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A, E and H occupancies in buildings which are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit.

- 1) The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
- 2) The doors unlock upon loss of power controlling the lock or lock mechanism.
- 3) The door locks shall have the capability of being unlocked by a signal from the fire command center.
- 4) The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds is applied for 1 second to the release device. Initiation of the irreversible process shall activate and audible signal in the vicinity of the door. Once the door lock has been release by the application of force to the releasing device, relocking shall be by manual means only.
Exception: Where approved, a delay of not more than 30 seconds shall be permitted.
- 5) A sign shall be provided on the door located above and within twelve (12) inches of the release device reading: **PUSH UNTIL ALARM SOUNDS, DOOR CAN BE OPENED IN 15 SECONDS.**
- 6) Emergency lighting shall be provided at the door.

ALL DOORS SHALL COMPLY WITH THE FOLLOWING

POSITIVE LATCHING

The Building Code classifies many doors, due to location and the function performed by the doors, as fire assemblies or fire doors (refer to IBC Section 715). One of the many requirements of the Code for fire doors is that they must be positive latching. This simply means that in the closed position, fire doors will **always**, under every possible condition, remain latched. The basis for this requirement is to prevent the pressures created in a fire from blowing the fire doors open and thereby negating their contribution to building safety. Fire doors are required in stair enclosures, fire control rooms and other fire-protected openings. Also, fire doors are required in elevator lobbies and some public corridors. Special locking systems used in fire rated enclosures shall be UL Listed for fire rated enclosures.

TWO STEP EGRESS

Doors must always be operable from the “egress” side without the use of a key or special knowledge or effort and with only one operation. This has been interpreted locally to mean that both the unlocking and unlatching must occur simultaneously with one operation.

The unlatching of any leaf shall not require more than one operation.

Exception: More than one operation is permitted for unlatching doors in the following locations:

- 1) Places of detention or restraint.
- 2) Where manually operated bolt locks are permitted by Section 1008.1.8.4.
- 3) Doors with automatic flush bolts as permitted by Section 1008.1.8.3, Exception 3.
- 4) Doors from individual dwelling units and guestrooms of Group R occupancies as permitted by Section 1008.1.8.3, Exception 4.

Since operating a push button constitutes an “operation”, doors must be free swinging after the button is pushed to release the magnetic lock. Doors are not permitted to be equipped with “backup” mechanical dead bolt locks to maintain security in the event of power loss. As mentioned above, magnetic locks with “push to exit” buttons must unlock in the event of power loss to the building; therefore, these type locks can only be equipped with battery backup under special conditions approved by the Building Official and Fire Marshal.

MULTI-STORY BUILDINGS

In multi-story buildings, all electrically controlled doors must be able to be unlocked (fire doors must remain latched) simultaneously from a switch in the fire control room or other approved location. Combined with the restriction on two-step egress, this requirement also prevents the use of push to exit button-equipped magnetic locks on stair doors.

ELECTRICAL PERMITS

An electrical permits shall be obtained for any electrical work performed in the installation of the lock systems and controllers.