



# Access-Controlled Egress Doors

Fire and Health Safety Child Care Licensing Department of Social Services

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# Purposes of Presentation

This presentation provides the following information to use when choosing a system to control unaccompanied access to a facility.

- a) Magnetic device (installed per International Fire Code IFC or Building Code BC)
- b) Electric strikes
- c) Electric latches
- d) Release devices
- e) Keyless entry locks

This presentation will <u>not</u>:

- Cover all aspects of each code requirement
- Cover child care laws and regulations
- Provide case-by-case interpretations

## a) Magnetic Device (installed per International Fire Code or Building Code)

IFC 1010.1.9.8 allows access-controlled egress doors for Group E (Child Care) facilities as long as seven requirements (starting on next slide) are met.

- Door hardware is to remain as required by the IFC.
- Rated doors are required to maintain listed latching hardware.
- Panic hardware or, where required, fire exit hardware must meet the IFC.
- When panic hardware is not required, minimum single action direct-acting hardware must be maintained.
- Magnetic locks are capable of preventing the door that is required by code from opening from the egress side.
- Magnetic locks are not allowed to interfere with the egress in any way.



# Requirements #1-#3 for a Magnetic Device

#### Requirement 1 (IFC 1010.1.9.8)

- 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.

Requirement 2 (IFC 1010.1.9.9)

Loss of power to the part of the access control system that locks the doors shall automatically unlock the doors.

## Requirement 3

Loss of power to the lock or locking system shall automatically unlock the electric locks.



# Requirements #4-#5 for a Magnetic Device

PUSH

TO

EXIT

#### Requirement 4

- The doors shall be arranged to unlock from a manual unlocking device located 40-48 inches (1016-1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors.
- ➤ Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads ""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, and the doors shall remain unlocked for a minimum of 30 seconds.

### Requirement 5

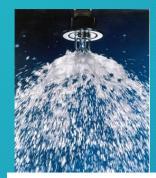
- Activation of the building fire alarm system, if provided, shall automatically unlock the doors.
- The doors shall remain unlocked until the fire alarm system has been reset.
- Note: The connection to the fire alarm is to be verified by a South Carolina-licensed professional annually on the Inspection and Testing Form for the fire alarm system.



# Requirements #6-#7 for a Magnetic Device

#### Requirement 6

- Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors.
- The doors shall remain unlocked until the fire alarm system has been reset.
- Note: The sprinkler's connection to the building fire alarm is to be verified annually by a South Carolinalicensed professional on the Inspection and Testing Form for the fire alarm system.





## Requirement 7

- The door locking system units shall be listed in accordance with UL 294.
- Magnetic locks are capable of preventing the door from opening as required by the code from the egress side.
- Magnetic locks are not allowed to interfere with an egress door in any way during a facility's open hours.



# b) Electric Strikes

- Required exit accesses, exits, or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency when the areas served by such exits are occupied.
- The security devices affecting means of egress shall be subject to approval of the fire code official.

- When properly installed electric strikes may be used in child care for an egress door without interfering with egress capability in any way.
- ➤ It may be used with a variety of access-control devices.

# b) Electric Strikes continued

Access control device used to enter a facility



Electric strike activated by the Chosen type control device

There is no interference with the egress latch.



## c) Electric Latches

- Required exit accesses, exits, or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency when the areas served by such exits are occupied.
- The security devices affecting means of egress shall be subject to approval of the fire code official.
- When installed, electric latches may be used in child care for an egress door without interfering with egress capability in any way.
- It may be used with a variety of access-control devices.





## c) Electric Latches continued

IFC 1010.1.10. Panic and fire exit hardware.

- Fach door is a means of egress from a Group A or E occupancy having an occupant load of 50 or more and any Group H occupancy shall not be provided with a latch or hook unless it is panic hardware or fire exit hardware.
- Panic hardware must be used where required.
- Fire exit hardware (listed panic hardware) is required for a fire rated door.



## c) Electric Latches continued

## IFC 1010.1.9.6 Unlatching.

- The unlatching of any door or leaf shall not require more than one operation.
- Single action direct acting hardware is required when panic hardware is not required.
- Please note that listed hardware is required for a fire rated door.



# d) Release Devices

### Remote Release and Camera





## Fingerprint Control Device



# Combination and Proximity Control Device



# d) Release Devices continued

Magnetic Card Access Control Device

Password Access Control Device





## e) Keyless Entry Locks

- ➤ Required exit accesses, exits or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency when the areas served by such exits are occupied.
- The security devices affecting means of egress shall be subject to approval of the fire code official.
- When properly installed, a keyless or other type of access locks may be used in child care for an egress door and will not interfere with egress capability in any way.



# e) Keyless Entry Locks continued

- Required exit accesses, exits or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency when the areas served by such exits are occupied.
- ➤On the egress side, a single action direct acting hardware, panic hardware, or fire exit hardware may be required.
- Remember, listing must be maintained for fire rated doors.



## **Contact Information**

# Department of Social Services Child Care Licensing

- Each regional office has an assigned Fire Marshal.
- The Chief Fire Marshal is based out of Central Office.

Central Office	Upstate Region	Midlands Region	Lowcountry Region	Pee Dee Region
(800) 556-7445	(800) 637-8550	(888) 202-1469	(800) 260-0211	(800) 464-9138
(803) 898-9020	(864) 250-5576	(803) 898-9001	(843) 953-9780	(843) 661-6623