

Elevator Lobby Egress



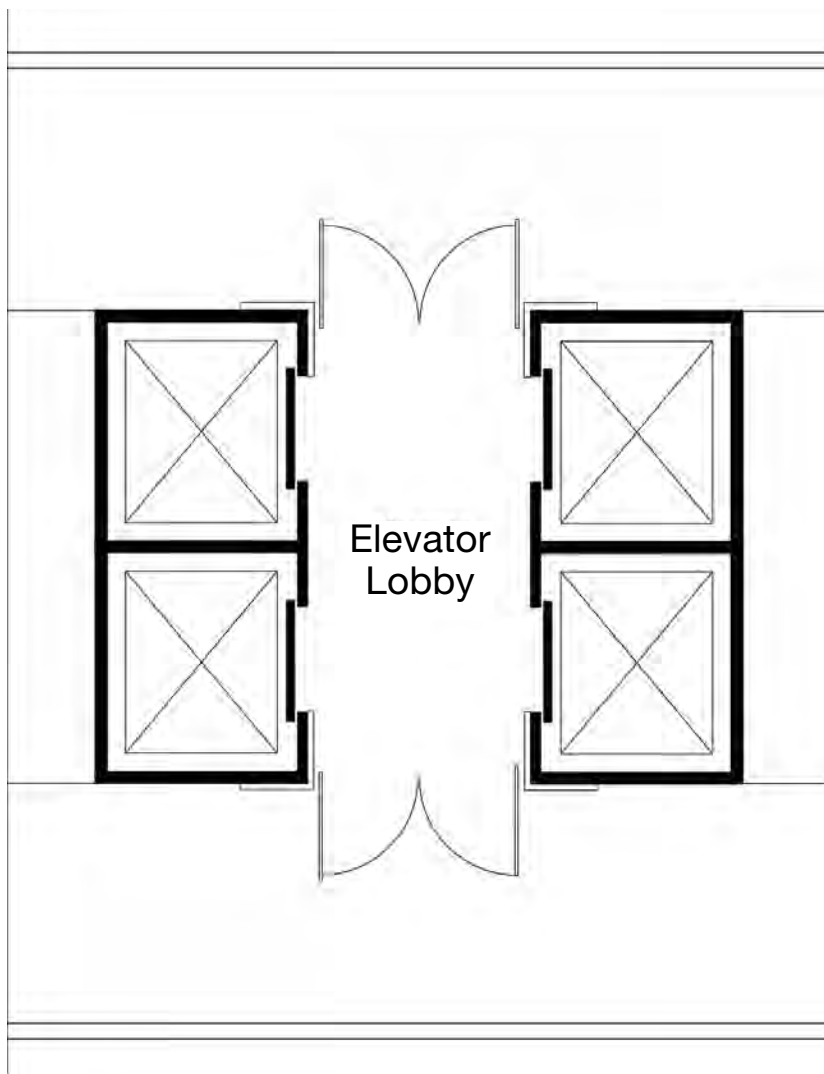
From the well-known blog idighardware.com, Lori Greene brings some much-needed clarity to codes.

BY LORI GREENE, AHC/CDC, CCPR, FDHI

THE REQUIREMENTS FOR EGRESS FROM AN ELEVATOR LOBBY DIFFER between the *International Building Code (IBC)* and NFPA 101, *The Life Safety Code*, or NFPA 5000, *Building Construction and Safety Code*. The IBC simply states that elevator lobbies must have at least one means of egress complying with Chapter 10 and other provisions within the code. Because elevators do not usually qualify as a means of egress, there must be an egress path leading from the elevator lobby to an exit enclosure—typically a stairwell enclosed with fire-resistant walls and opening protectives (fire door assemblies). The doors in this egress path must be code-compliant, allowing free egress under normal conditions—not just upon fire alarm. Depending on the use group, the IBC may allow delayed egress locks to be used as a means of securing elevator lobby doors, but the required signage can be confusing for building occupants using the doors during periods when they are not secured.

A section was added to the 2009 editions of NFPA 101 and NFPA 5000 to address elevator lobby egress requirements, and in both the 2009 and 2012 editions the section is called Elevator Lobby Exit Access Door Assemblies Locking (7.2.1.6.3 in NFPA 101, 11.2.1.6.3 in NFPA 5000). This would only apply to buildings where NFPA 101/NFPA 5000 were being enforced, not to buildings where the IBC/IFC were being used. In the NFPA codes, this section states that where permitted by the occupancy chapters, door assemblies separating the elevator lobby from the exit access may be electrically locked, provided that the long list of criteria is met. This list includes:

- Initiation of the fire alarm system by other than the manual fire alarm boxes unlocks the elevator lobby door.
- Loss of power to the electronic lock system unlocks the elevator lobby door.
- After being unlocked, the elevator lobby door remains unlocked until the fire alarm system has been manually reset.
- If the door remains latched after it is unlocked, hardware to release the latch must be mounted on the door, between 34 inches and 48 inches above the floor, and must have an obvious method of operation and be readily operable with one motion under all lighting conditions.




- The electronic lock must be listed in accordance with UL 294, *Standard for Access Control System Units*.
- The building must be protected throughout by a fire alarm system and an approved, supervised automatic sprinkler system, arranged so that water-flow in the sprinkler system initiates the fire alarm.
- The elevator lobby must be protected by an approved, supervised smoke detection system, arranged so that detection of smoke initiates the fire alarm system and notifies building occupants.
- A two-way communication system must be provided for communication between the

elevator lobby and a central control point that is constantly staffed by capable, trained, and authorized personnel who can provide emergency assistance.

- The provisions for delayed egress locks and access controlled egress doors are not applied to elevator lobby doors.
- The 2009 edition included a requirement that the electronic lock on the lobby door must not be supplied with emergency or standby electrical power, but this requirement was removed from the 2012 edition of NFPA 101 and NFPA 5000.

In a nutshell, this section allows the elevator lobby door to be equipped with a fail-safe lockset that unlocks on fire alarm and

power failure, as long as all of the criteria are met. The mention of delayed egress and access-controlled egress is not intended to mean that an access control reader cannot be installed, but that the requirements of these sections (i.e., sensor and push button release, 15-second delay, etc.) do not apply to elevator lobby doors. The occupancy types that allow this application include Assembly, Educational, Day Care, Health Care, Ambulatory Health Care, Hotels and Dormitories, Apartment Buildings, Mercantile, and Business occupancies. There is also a paragraph in the High-Rise section that allows this application to be used on any high-rise building “other than newly-constructed high-rise buildings.”

Some state and local building codes have added similar language pertaining to elevator lobby doors; however, the *International Building Code* does not include a section specifically addressing elevator lobby door locks—only the requirement that elevator lobbies have at least one code-compliant means of egress. This door could be equipped with a passage set, an alarm, or possibly a delayed egress lock, but there are currently no provisions within the IBC that would allow a fail-safe electrified lock released upon fire alarm and power failure only. Check the local codes in the location of your facility or project to see which requirements specifically pertain to that jurisdiction. 

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