



City of Houston
Building Inspection
CODE WORD 2012

INTERPRETATIONS AND APPLICATIONS OF
THE HOUSTON ADOPTED CODES
2012 IBC, 2012 IRC, 2014 NEC, 2012 UMC, 2012 UPC,
2015 IECC and ASHRAE 90.1-2013

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PUBLICATION:	October 12, 2017				
SUBJECT:	Electronically Locked Egress Door(s)				
CODE(S):	Houston Adopted IBC (2012)				
SECTION(S)	104.11 Alternate Method (Specific Approval)				

Definitions. For the purpose of this Code Word, the following definitions apply:

FAIL-SAFE. A design condition incorporating a feature for automatically counteracting the effect of an anticipated possible source of failure; also, a design condition eliminating or mitigating a hazardous condition by compensating automatically for a failure or malfunction.

FAIL SECURE. Shall mean that the loss of power to the locking system will allow the doors to remain locked.

Except as specifically addressed in other sections of the Houston Construction Code, to qualify for specific approval, all electronically locked egress doors shall meet the following requirements:

1. Electronic locks that are electronically locked from the ingress side and can be mechanically unlocked from the egress side, can be fail secure from the ingress side.

Exception: Stairway enclosure reentry doors required by Section 403 shall be fail-safe.

2. Electronic locks that unlock electronically from the egress side shall be fail-safe and must be unlocked by a listed direct power-interrupting device without time delay. If a motion sensor is used, a secondary in-line manual unlocking device shall be installed. If the lock is controlled by a relay, removal of power from the relay shall also cause the lock to fail-open.

Exception: Egress-control devices meeting the requirement of Section 1008.1.9.7 may be of the time-delay type.

3. Doors in excess of the number required for exits may be electronically controlled, provided there is a manual unlocking device.
4. An exit door from an elevator lobby may be controlled by an electronic lock with an emergency manual unlocking device (direct in-line power interrupting switch) on the lobby side, provided the building has an automatic fire alarm system, including smoke detectors, located in the lobby and corridors or a complete sprinkler system that is interconnected to the fire alarm system.

The manual unlocking device associated with electronically controlled egress doors shall be either a manual fire alarm pull station or a push button [minimum of 1½ inches in size] located 40 inches to 48 inches vertically above the floor and within 5 feet of the secured door. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads: **PUSH/PULL TO RELEASE DOOR IN AN EMERGENCY.** When operated, the manual unlocking device shall result in direct interruption of power to the lock "independent of other electronics" and the doors shall remain unlocked for not less than 30 seconds. Activation of the building fire alarm or fire sprinkler system, where provided, shall automatically unlock the door, and the door shall remain unlocked until the *fire alarm system* has been reset. The door locking system units shall be listed in accordance with UL 294.

Approved:

A handwritten signature in black ink, appearing to read "R. Oakes".

Robert H. Oakes, Acting Building Official