## **DECODED:**

## Delayed Egress Hardware— Code Comparison



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

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elayed egress hardware prevents a door from being opened from the egress side, usually for a period of 15 seconds. This type of device is often used to prevent theft while maintaining life safety. The system is most commonly comprised of an exit device, incorporating delayed egress features, or an electromagnetic lock and power supply, one of which contains delayed egress circuitry. When the device is actuated, the door remains locked on the egress side for 15 seconds and then releases to allow egress.

Before specifying or supplying delayed egress hardware, you must verify that it is allowed to be used in the applicable occupancy classification, and be aware of the other code requirements that pertain to the use of this product. The requirements vary depending on whether you are referring to the *International Building Code* (IBC) or NFPA 101, *The Life Safety Code*. There may be additional local requirements as well.

NFPA 101 allows the use of delayed egress hardware on all occupancy types (low or ordinary hazard), with some

conditions that must be met if it is used (see Table 2). Conversely, the IBC does not allow the use of delayed egress hardware on doors serving assembly, educational, or high hazard occupancies. This means that for jurisdictions enforcing the IBC, delayed egress hardware is not allowed in schools or in assembly occupancies like libraries, which would otherwise be prime locations for this type of hardware. In this case, a local alarm can be used to deter use of the door, but no delay would be allowed by code. A variance may be granted for certain types of assembly occupancies, such as museums, but the process for obtaining the variance must be followed and documented.

Refer to the following tables for the requirements pertaining to delayed egress hardware, and note the subtle differences between codes. When specifying or supplying delayed egress hardware, verify which code and edition are to be used and the occupancy classification of the project; then apply the appropriate requirements to ensure that your installation is code-compliant.

**Table 1: Delayed Egress Hardware** 

Code:	International Building Code	NFPA 101
Editions:	2003, 2006, 2009, 2012	2003, 2006, 2009
Occupancy Types:	Allowed in all occupancies except A (Assembly), E (Educational), and (H) High Hazard	Allowed in all occupancies (low and ordinary hazard), with some conditions for use. Refer to Table 2.
Products:	Approved, listed, delayed egress locks	Approved, listed, delayed egress locks
Alarm System:	Building must be protected throughout by an automatic sprinkler system or approved automatic smoke or heat detection system	Building must be protected throughout by an approved, supervised, automatic fire detection or sprinkler system
Quantity:	Building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit	Refer to Table 2
Initiation:	Not more than 15-pound force applied for 1 second, irreversible process	Not more than 15-pound force applied for not more than 3 seconds, irreversible process
Rearm:	Device must be rearmed manually	Device must be rearmed manually
Alarm Release:	Doors allow immediate egress (no delay) upon actuation of the automatic sprinkler system or automatic fire detection system; capability of release from the fire command center	Doors allow immediate egress (no delay) upon actuation of the sprinkler system; not more than one heat detector, or not more than two smoke detectors
Loss of Power:	Doors allow immediate egress (no delay) upon loss of power controlling the delayed egress lock	Doors allow immediate egress (no delay) upon loss of power controlling the delayed egress lock
Extension of Delay:	Up to 30-second delay when approved by AHJ	Up to 30-second delay when approved by AHJ
Audible Alarm:	Required, in the vicinity of the door	Required, in the vicinity of the door
Signage:	On the door, above and within 12" of the release device: "PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS."	Visible, durable sign on the door leaf adjacent to the release device, with letters 1" high minimum with 1/8" minimum stroke width on contrasting background: "PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS."
Emergency Lighting:	Required at the door	Required at the door

**Table 2: Occupancies Permitting Delayed Egress Locks** 

NFPA 101 – 2003, 2006, 2009 Editions		
Occupancy	Condition	
Assembly	Only doors other than main entrance/exit doors may be equipped with delayed egress locks	
Educational/Day Care	No restrictions	
Health Care, Lodging and Rooming Houses, Hotels and Dormitories, Apartment Buildings	Not more than one delayed egress device may be encountered in any egress path	
Residential Board and Care	Exterior doors only; not more than one delayed egress device may be encountered in any egress path	
Ambulatory Health Care	No restrictions (editions of NFPA 101 prior to 2003 limit the use of delayed egress devices in ambulatory health care occupancies to exterior doors)	
Mercantile, Business, Industrial, Storage	No restrictions	