

Decoded Class 4 – Electrified Hardware

Use the 2021 editions of NFPA 101 – Life Safety Code and the International Building Code (IBC) to answer the following questions:

1) For fire doors where stairwell reentry is required, which product is the correct hardware to use?

- a) electric latch retraction device
- b) electrified panic hardware trim or electromechanical lock
- c) electric strike
- d) delayed egress lock

2) Stair doors that are lockable on the stair side and required to meet the stairwell reentry requirements must have what type of product?

- a) fail safe
- b) fail secure
- c) delayed egress device
- d) passage set

3) When push/pull function is needed for a fire door under normal operation, what is the correct product to use?

- a) fail safe electric strike
- b) fail secure electric lock
- c) delayed egress device
- d) electric latch retraction device

4) Which application must meet the requirements of the NFPA 101 section called Sensor Release of Electrical Locking Systems?

- a) doors with access control readers
- b) electromagnetic locks released by door-mounted hardware
- c) electromagnetic locks released by a motion sensor
- d) electric latch retraction devices on fire doors

5) NFPA 101 and the IBC's requirements for delayed egress differ slightly, but a change made in the 2015 IBC brings one requirement into alignment with NFPA 101. What changed?

- a) required method of rearming the device
- b) duration of the egress delay
- c) number of seconds of applied force to activate the 15-second timer
- d) the requirement for signage to be present

6) The IBC does not include a special section for elevator lobby locks (change coming in 2024), but a section was added to NFPA 101 in the 2009 edition. What type of hardware would meet NFPA 101's requirements?

- a) fail secure electric strike
- b) fail safe electric lock
- c) electric latch retraction device
- d) fail secure electric lock

7) The IBC requirements for Door Hardware Release of Electrically Locked Egress Doors apply to which product applications?

- a) doors with electrified hardware and access control readers
- b) electromagnetic locks that are unlocked by a motion sensor
- c) electrified locks that are unlocked by a switch in the door-mounted hardware
- d) controlled egress locks on doors in a means of egress

8) Which of these locks is the best choice to secure a hospital unit such as a memory care floor, in compliance with the sections added to the IBC and NFPA 101 in 2009?

- a) fail secure electric strike with institutional function lockset
- b) electromagnetic lock or controlled egress lock
- c) electric latch retraction fire exit hardware
- d) electrified lever trim for panic hardware

9) An electric strike used on a fire door must be which function?

- a) fail safe
- b) fail secure
- c) either type may be used
- d) electric strikes are not allowed on fire doors

10) Because the IBC does not allow delayed egress locks on assembly occupancies (with one exception for courtrooms), which code-compliant product can be used to deter students from taking books out the emergency exit of a library?

- a) alarmed panic hardware
- b) electric latch retraction panic hardware
- c) electromagnetic lock
- d) electric strike

Answers: 1 – b, 2 – a, 3 – d, 4 – c, 5 – c, 6 – b, 7 – c, 8 – b, 9 – b, 10 - a