

U.S. Fire Administration / National Fire Academy

Coffee Break Training

Topic: Panic and Fire Exit Hardware

Learning objective: The student shall be able to explain the difference between panic and fire exit hardware, and explain where they can be used.

Most persons are familiar with "panic hardware"; the push bar or pad that extends across a door leaf so that persons escaping a building simply have to push against it to release the latching mechanism.

Typically, panic hardware is required on exterior or egress doors in assembly, educational, or hazardous occupancies to open doors quickly for rapid egress. Even doors from some electrical rooms with high voltage equipment now require panic hardware. The model codes require that the operating mechanism for panic hardware extend across at least one-half the door width, and the releasing force may not exceed 15 pounds (67N). Egress hardware must be located between 34 inches (86 cm) and 48 inches (122 cm) above the floor.

"Fire exit hardware" is a type of panic hardware, but there is a significant difference between the two. While panic hardware devices may be locked "open" so a door is free to swing in its frame without latching, fire exit hardware must positively latch into the strike plate in the door jamb when the door is closed. The purpose is to prevent the door from swinging open in the event of increased air pressure from a fire on one side of the door.

Fire exit hardware is employed where a fire-rated protective opening must be installed, and that door also must be equipped with panic hardware. These applications would include exits from stair enclosures and exits that may be so close to adjacent property lines that fire door assemblies are required.

Fire exit hardware may be installed anywhere panic hardware is required, but panic hardware is not allowed where fire exit hardware must be installed.

Inspectors should look closely at the labels installed on the hardware. The illustration shows an example of a label on listed "Fire Exit Hardware." Always refer to the locally-

adopted building and fire codes to determine where these hardware types are required.



For additional information, refer to International Fire Code[®], Chapter 10; International Building Code[®], Chapter 17; NFPA 1, Uniform Fire Code[®], Chapter 14; NFPA 101, Life Safety Code[®], Chapter 7; and NFPA 5000, Building Construction and Safety Code[®], Chapter 11.