

U.S. Fire Administration / National Fire Academy

*Coffee Break Training***Topic: Emergency Egress Lighting**

Learning objective: The student shall be able to describe the requirements for emergency egress lighting.

When an occupancy's primary power supply is interrupted, potentially plunging the means of egress into darkness, the challenge for prompt and injury-free egress is increased substantially.

While a building's exit system needs to be illuminated at all times during normal operations, the fire and building codes recognize the need for "emergency egress illumination."

In the event of a power failure, an emergency power system lasting not less than 90 minutes must automatically illuminate:

- Aisles and unenclosed egress stairways in rooms and spaces that require two or more means of egress.
- Corridors, exit enclosures, and exit passageways in buildings that are required to have two or more means of egress.
- Exterior egress components at other than the level of exit discharge until exit discharge is accomplished for buildings required to have two or more means of egress.
- Interior exit discharge elements in buildings that are required to have two or more means of egress.
- Exterior landings for exit discharge doorways elements in buildings that are required to have two or more means of egress.



The emergency power system may consist of storage batteries, an onsite generator, or "unit equipment" as illustrated in the photograph.

The lighting must be capable of illuminating the exit path an average of 1 foot-candle (11 lux) and a minimum of 0.1 foot-candle (1 lux) at any point. Illumination levels are permitted to decline to 0.6 foot-candles (6 lux) and a minimum at any point of 0.06 foot-candle (0.6 lux) at the end of the 90 minutes. This allowable decline acknowledges that the battery performance will decline over time as the lights operate.

Fire inspection personnel must remember to check the operation of emergency egress lighting whenever they conduct a fire safety inspection. Faulty units or burned-out bulbs should be repaired or replaced promptly.

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