

Familiarize Yourself with Common Fire and Life Safety Issues:
Means of Egress – Illumination



Proper illumination of egress paths helps occupants safely and efficiently exit a building during normal and emergency conditions. Means of egress illumination is regulated by Section 1008 of the Fire Code. The proper maintenance of required lighting and testing of emergency lighting is critical to ensure that they will operate properly during an emergency. The inspection and testing of emergency lighting equipment is regulated by Section 604.6 of the Fire Code.

Means of Egress Illumination, Fire Code Section 1008.2

Means of egress serving a room or space shall be illuminated at all times the room or space is occupied. The fire code does grant limited exceptions which includes dwelling units and sleeping areas.

Section 1008.2.1 establishes the minimum level of illumination under normal power at 1 foot-candle (11 lux) at the walking surface. (***Foot-candle: a unit of illuminance on a surface that is everywhere one foot from a uniform point source of light of one candle and equal to one lumen per square foot.***) The fire code does allow for illumination of walkways to be reduced in auditoriums, theaters, concert or opera halls and similar assembly occupancies during performances as long as the required illumination is restored upon activation of the fire alarm. While the code allows for the illumination to be reduced, minimal illumination of .2 foot-candle shall be provided for walking surfaces or the surfaces shall be adequately marked with self-luminous materials.

Emergency Means of Egress Illumination, Fire Code Section 1008.3

In the event of a power failure in buildings, room or spaces that require two or more means of egress an emergency electrical system shall automatically illuminate all required aisles, corridors, exit access stairways and ramps. In addition, the following areas shall also be illuminated: Electrical equipment rooms; Fire command centers; Fire pump rooms; Generator rooms; and Public restrooms with an area greater than 300 square feet.

Duration: The emergency power system shall provide power for a duration of not less than 90 minutes and shall consist of storage batteries, unit equipment or an on-site generator.

Illumination level under emergency power: Illumination under emergency power shall initially provide an average illumination of 1 foot-candle (11 lux) and a minimum at any point of 0.1 foot-candle (1 lux) measured along the path of egress at floor level.

Emergency Lighting Equipment Inspection and Testing, Fire Code Section 604.6

Emergency lighting equipment shall be inspected and tested monthly and annually in order to ensure that the lighting will activate during an emergency.

Activation Testing: Activation test of the emergency lighting equipment shall be completed monthly. The activation test shall ensure that the emergency lighting activates automatically upon normal electrical disconnect and stays sufficiently illuminated for not less than 30 seconds.

Power Testing: For battery powered emergency lighting, a power test of the emergency lighting equipment shall be completed annually. The power test shall operate the emergency lighting for not less than 90 minutes and shall remain sufficiently illuminated for the duration of the test.

Inspection and Testing Records: Records shall be maintained of all inspections and testing of emergency lighting. It is recommended that all records be maintained for at least three (3) years.

If you should have any questions regarding means of egress in your building, please feel free to contact me. In the next issue of "From the Ground Up", we will continue our discussion on the means of egress components and common deficiencies related to the means of egress.

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