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Emergency Lighting 042

042. EMERGENCY LIGHTING

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042. EMERGENCY LIGHTING. (7-1-97)

01. Scope: Every facility, building, structure, or portion thereof shall be provided with emergency lighting as required by this section. Where there is a conflict between a general requirement and a specific requirement for an individual occupancy, the specific requirement shall be applicable. (7-1-97)

02. Definitions. For other definitions of terms used in this section, see sub-section 010 of this standard. (7-1-97)

03. General Requirements: (7-1-97)

a. Emergency lighting systems for means of egress shall be provided for every facility, building, or structure in accordance with this section. (7-1-97)

b. The power supply for exit illumination shall normally be provided by the premises wiring system. In the event of its failure, illumination shall be automatically provided from an emergency system. Emergency illumination shall be provided for nurseries for the full time care of children under age six (6), hospitals, sanitariums, and nursing homes each accommodating more than five (5) persons. Emergency illumination shall be provided for all other facilities, buildings, or structures where the exiting system serves an occupant load of one-hundred (100) or more. Emergency illumination shall be provided for boiler rooms. Due to the potential for injury, in the event of a failure of the primary illumination system in facilities, buildings, or structures used for night occupancy and in all portions of a facility, building, or structure that are interior or windowless, such as; rooms, stairways, corridors, maintenance areas, or other areas where loss of illumination could create a hazard, shall be equipped with emergency lighting. (7-1-97)

c. Emergency illumination systems shall be supplied from storage batteries or an on-site generator set. The system shall be installed in accordance with the requirements of this standard and the National Electrical Code (NFPA 70). (7-1-97)

d. Where maintenance of illumination depends upon changing from one energy source to another, there shall be no appreciable interruption of illumination during the changeover. Where emergency lighting is provided by a prime mover-operated electric generator, a delay of not more than ten (10) seconds shall be permitted. (7-1-97)

04. Performance of System: (7-1-97)

a. Emergency lighting systems shall be arranged to maintain the specified degree of illumination for a period of one and one-half (1 1/2) hours in the event of failure of the normal lighting all facilities, buildings, and structures. (7-1-97)

b. Electric battery-operated emergency lights shall use only reliable types of storage batteries, provided with suitable systems for maintenance in properly charged condition. Battery operated emergency lighting systems shall be tested for operability monthly and a record of such tests shall be kept. Electric storage batteries used in such lights or units shall be approved for their intended use and shall comply with the National Electrical Code (NFPA 70). Controlling circuit breakers or other cut offs for emergency lighting systems shall be readily identified. (7-1-97)

c. An emergency lighting system shall be so arranged as to provide the required illumination automatically in the event of any interruption of normal lighting, such as any failure of public utility or other outside electrical power supply, opening of a circuit breaker or fuse, or any manual act(s), including accidental opening of a switch controlling normal lighting systems. (7-1-97)

d. An emergency lighting system either shall be continuously in operation or shall be capable of repeated automatic operation without manual intervention. (7-1-97)

e. Where gas vapor lighting is the sole source of illumination, other types of lighting shall be used to provide illumination when electrical power is restored until the gas vapor lights re-illuminate. (7-1-97)

f. Emergency generators shall be tested for operability monthly and a record of such tests shall be kept. (7-1-97)

05. Exit Marking: (7-1-97)

a. Exit signs shall be internally or externally illuminated by two (2) electric lamps or shall be of an approved self-luminous type (photo-luminous exit signs are not an approved type). When the luminance on the face of an exit sign is from an external source, it shall have an intensity of not less than five (5) foot-candles from either lamp. Internally illuminated exit signs shall provide an equivalent luminance. (7-1-97)

b. Electric current supply to one of the lamps for exit signs shall be provided by the premises wiring system. Electric power to the other lamp shall be from storage batteries or an on-site generator set. The system shall be installed in accordance with this standard and the National Electrical Code (NFPA 70). (7-1-97)

c. Exit signs using batteries to provide back-up illumination shall use only reliable types of storage batteries, provided with suitable systems for maintenance in a properly charged condition. Exit signs with batteries shall be tested for operability monthly and a record of such tests shall be kept. (7-1-97)