

## SECTION 26 52 00 –EXIT AND EMERGENCY LIGHTING

### PART 1 - GENERAL

#### 1.1 SUMMARY [Note to AE:

- A. *Emergency Generator System: If an emergency generator system is present and has adequate capacity, it shall be used to power fluorescent fixtures and exit signs. This shall be the preferred backup power source for all buildings.*

*In buildings without standby generators, AE shall investigate the practicality of extending emergency power service from a generator at an adjacent campus building, if available. This type of "generator sharing" greatly reduces costs and space requirements for installing and maintaining generators.*

- B. *Existing Inverter Systems: If an existing building has a functional lighting inverter system with adequate capacity, emergency lighting and exit signs shall be connected to this system. However, new battery inverter systems shall not be installed in campus buildings.*
- C. *Battery powered lights: Individual battery powered lights and exit signs are only permitted when neither of the above power sources is available or has adequate capacity. These buildings are typically smaller than 25,000 square feet, with no basement and no other requirements for emergency power.]*

#### 1.2 REFERENCE STANDARDS

- A. NFPA 101 - Code for Safety to Life from Fire in Buildings and Structures
- B. National Electric Code
- C. UL 924 – Standard for Safety of Emergency Lighting and Power Equipment

### PART 2 - PRODUCTS

#### 2.1 CIRCUITS

- A. Emergency lighting in stairways, exits and corridors shall be served by circuits entirely independent of other lighting. These circuits shall be supplied from panelboards and feeders separate from that for the general lighting system.
- B. Emergency lighting shall be connected to normally "on" emergency circuits, which shall not be controlled by local switches.

#### 2.2 FLUORESCENT LIGHTS ON EMERGENCY POWER

- A. *[Note to AE: The preferred method of providing egress illumination shall be to connect selected fluorescent fixtures, or selected lamps, to emergency circuits. These unswitched fixtures shall also function as night lights. Do not use a greater number of always-on fixtures than is needed to adequately provide egress illumination, and always select the most efficient source available.]*
- B. Fluorescent lights with battery-operated ballasts are not permitted, due to difficulties with maintenance and troubleshooting.

## 2.3 BATTERY POWERED EMERGENCY LIGHTS

- A. *[Note to AE: When practical, group multiple remote heads and/or exit signs on a single battery. These larger central batteries (per building or per floor) may use sealed or wet-cell batteries with a ten (10) year life expectancy. This type of emergency lighting system shall be installed wherever practical in an effort to minimize the number of individual battery-operated emergency lights and exit signs. The emergency lighting system's battery and electronics shall be installed in electrical and mechanical equipment rooms wherever practical.]*
- B. The circuits that provide normal power to battery powered emergency lights shall be normally on, un-switched "night light" circuits that feed corridor, stairway and exit lights. These circuits shall be separate from all other lighting circuits in the building.
- C. Units shall have a 3 year, 100 percent, no cost, complete unit exchange warranty.
- D. Individual emergency lighting units shall use sealed, pure lead, lead-calcium or nickel-cadmium batteries with a ten (10) year life expectancy.
- E. Units shall be capable of automatic 30 second exercise cycling on a 30 day basis, and automatic deep discharge cycling on a 12 month basis.
- F. Units shall have self-diagnostic feature with externally visible LED indicators to indicate trouble and malfunction. They shall not contain any audible alarms indicating trouble or malfunction.
- G. Units shall have an external switch or sensor to allow manual initiation of a 30 second and a 30 minute test of the battery and lamps.
- H. Units installed at heights more than twelve feet above the floor, and units covered by a plastic guard, must be capable of being tested using a laser pointer.

## 2.4 EXIT FIXTURES

- A. Exit signs shall be surface mounted or totally recessed. Edge lit plastic or glass is not permitted.
- B. Exit signs shall be illuminated with red light emitting diode (LED) type lamps. The LED lamps shall appear to form solid letters. Exit signs with the appearance of individual LED lamps are not permitted.
- C. Exit signs shall comply with UL 924. "Self-powered" or non-powered exit signs are not permitted.
- D. The requirements of section 2.3 above shall also apply to battery-powered exit signs.

END OF SECTION **26** 52 00

This section of the *U of I Facilities Standards* establishes minimum requirements only.  
It should not be used as a complete specification.