## 2. Emergency Lighting

## 2.1. Intention

- **2.1.1.** The provisions of this chapter require that all exits and exit routes in a facility shall be provided with luminaries that are backed up by emergency power such as Battery or UPS. So that during fire emergencies and/or upon loss of power in the facility, means of egress is illuminated for evacuees with 'emergency lighting'.
- **2.1.2.** The objective of having emergency lighting during emergencies or when the normal lighting of the occupied building fails is to
  - a. Indicate clearly and unambiguously the escape routes.
  - b. Provide illumination along such routes to allow safe movement towards and through the exits provided.
  - c. Ensure that fire alarm call points and fire fighting equipment provided along escape routes can be readily located.
  - d. Permit continuity of High hazard operations to be terminated safely.
- **2.1.2.** Such emergency lighting needs to be designed, installed and maintained to achieve its purpose during emergencies. This chapter addresses the design, performance of the system, installation and maintenance requirements for emergency lighting.

## Did You Know?

The core purpose and requirements of Emergency Lighting in a building has not been changed since 1927, when it was first introduced through NFPA exit codes

## 2.2. General

- **2.2.1.** Three types of Emergency lighting systems are permitted by Civil Defence, depending on the nature of occupancy.
  - a. Central Battery System.
  - b. Monitored Type Self-contained Emergency Lighting System.
  - c. Self Contained, stand alone Emergency Lighting.
- **2.2.2.** The emergency lighting system shall be arranged to provide the required illumination automatically in the event of any interruption of normal lighting due to any of the following:
  - a. Failure of a public utility or other outside electrical power supply.
  - b. Opening of a circuit breaker or fuse.
  - c. Manual act(s), including accidental opening of a switch controlling normal lighting Facilities.
- 2.2.3. The requirements in this chapter are minimum guidelines for performance requirements, design and installation of emergency lighting. It is consultant's responsibility to refer to NFPA 101, NFPA 70, NFPA 110 and Manufacturer's design guidelines for detailed design and performance requirements.
- **2.2.4.** Proper planning shall be exercised by consultant to consider the emergency lighting requirements of the facility during design stage itself. Ignoring appropriate selection of system, Luminaire selection based on lumen output, spare capacity, wiring requirements and lux requirements can prove to be costly in the later stages of project.

