

3. Types of Emergency Lighting Systems

3.1. General Requirements of Emergency Lighting

3.3.1. The general requirements of emergency lighting shall be as per **Table 6.1.**

Table 6.1: General Requirements of Emergency Lighting	
ITEMS	REQUIREMENTS
1. PRE-DESIGN CONSIDERATIONS (LOCATIONS OF EMERGENCY LIGHTING LUMINAIRE)	<ul style="list-style-type: none"> i. Locate the number of emergency luminaires required in the facility by identifying locations such as at exit doors, outside exit stairs, inside exit stairs, at change in elevation on walking path, at walking path intersections, near fire fighting equipment, circulation areas, refuge areas, exit access corridors, exit corridors etc. ii. Every landing of each stair shall have emergency luminaire. iii. Every change in direction of the exit corridor, walking path shall have emergency luminaire. iv. Outside exit stair at the discharge level shall be provided with emergency luminaire. v. Every Fire Hose Cabinet (FHC) in the corridor shall be within 2m of emergency luminaire. vi. Every First Aid Box shall be within 2m of the emergency luminaire. vii. Every Exit Sign that is intended to be externally illuminated, requires emergency luminaire within 2m. viii. Additional emergency luminaires shall be required at toilets, elevators, car parks, escalators, plant rooms, fire pump rooms etc. See Table 6.6.
2. LUX REQUIREMENTS	<ul style="list-style-type: none"> i. Each compartment greater than 280 m² shall have two luminaires, so that failure of one does not compromise the emergency illumination of the room and exit doors. ii. Emergency lighting shall provide an initial illumination not less than 1.1 lux at any point, measured at floor level along the egress path, or 1 m width of center line of this egress path. iii. Lux level shall be permitted to decline to not less than 0.65 lux at the end of, 3 Hours, at any point, measured at floor level along the egress path, or 1 m width of center line of this egress path. iv. The average initial illumination at floor level along the egress path, or 1 m width of center line of this egress path, shall not be less than 10.8 lux. v. Maximum to minimum ratio of illumination shall not exceed 40 to 1 (40:1) vi. Open areas that are not exit routes and where illumination is provided to avoid panicking of people due to darkness, lux level shall be permitted to be declined to 0.5 lux, at the end of 3 Hours, at any point. vii. High risk areas, where operations need to be shut-down or terminated safely, the initial average lux level shall not be less than 12 lux with no point in the area having lux level of less than 1.8 lux, at floor level.
3. DURATION	<ul style="list-style-type: none"> i. Emergency lighting shall be available for 3 Hours (180 minutes) immediately after the power failure. ii. Initial illumination shall not be less than 1.1 lux at any point, measured at floor level along the egress path, or 1 m width of center line of this egress path, (as per Table 6.1.2.). iii. Illumination shall be permitted to decline to not less than 0.65 lux at the end of 3 Hours at any point, measured at floor level along the egress path, or 1 m width of center line of this egress path (as per Table 6.1.2.)