

7. Inspection and Maintenance of Emergency Lighting

7.1. The emergency lighting systems shall be inspected as per **Table 6.8.**

Table 6.8: Inspection and Maintenance

ITEM	REQUIREMENTS
1. MONTHLY	<ul style="list-style-type: none"> i. Functional test shall be conducted every month for 30 seconds of simulation of mains failure. ii. For central battery and monitored type emergency lighting systems, self diagnostic “walk-through” test shall be conducted through control unit or computer and ensure that circuit integrity, battery and charger health and luminaire output are satisfactory. iii. Luminaire output, battery and charger health, circuit integrity etc. shall be recorded. iv. The battery and associated charger/control equipment shall be checked to verify that they are in a clean and satisfactory condition and that no exceptional environmental or other conditions exist that could damage or affect performance. v. Battery electrolyte levels shall be checked, where applicable, and refilled as necessary. vi. Terminals and intercell connectors shall be cleaned and regreased, if necessary, and cell tops shall be cleaned. vii. Individual cell voltages shall be checked and recorded where practical. viii. The specific gravity of pilot cells shall be checked and recorded, where applicable. ix. The conditions of the plates and sediment of free-electrolyte, lead-acid batteries in transparent containers shall be noted. x. All indicator lamps, meters, and controls shall be checked to verify that they are operating correctly. xi. The load value shall be checked to ensure that it is within the equipment rating.
2. ANNUALLY	<ul style="list-style-type: none"> i. A functional test shall be conducted annually for minimum of 3 hours. ii. The battery shall be discharged fully for 3 hours and availability of lux shall be verified. iii. System shall be put back to normal charging condition after 3 hours of functional test. iv. The lux level shall not decline to not less than 0.65 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 .
3. BATTERY REPLACEMENT	<ul style="list-style-type: none"> i. Self contained luminaire’s batteries shall be replaced every 4 years.