

INDUSTRIAL EMERGENCY LIGHTING

Compliance Guide | Testing, Inspection & Maintenance

Practical guidance for factories, manufacturing plants, production facilities, warehouses and industrial premises. This guide focuses on the operation, testing, maintenance and recording of emergency escape lighting systems.

01 | Legal duties and responsible persons

In England and Wales, the Regulatory Reform (Fire Safety) Order 2005 places duties on the responsible person to provide appropriate emergency routes, exits and emergency lighting where necessary, and to maintain fire safety facilities in an efficient state, working order and good repair. The Workplace (Health, Safety and Welfare) Regulations 1992 may also be relevant. Duties and applicable legislation vary across UK nations.

02 | Key technical standards

BS 5266-1 provides the UK code of practice for emergency lighting. **BS EN 1838** sets lighting application requirements, including relevant illuminance criteria. **BS EN 50172** addresses emergency escape lighting systems, including routine verification and records. **BS EN 60598-2-22** applies to emergency luminaires. **BS 7671** applies to associated electrical installation work. Always use applicable current editions and project requirements.

03 | Industrial fire risk assessment

The emergency lighting provision should reflect the current fire risk assessment and building layout, including escape routes, final exits, stairways, changes of level, intersections, fire-fighting equipment, alarm call points and relevant high-risk task areas. Racking changes, machinery relocation and building alterations may change coverage requirements.

04 | Escape lighting and high-risk task areas

Escape-route lighting assists safe evacuation; open-area (anti-panic) lighting helps people reach escape routes; high-risk task-area lighting supports safe termination of potentially dangerous processes where identified by risk assessment. Appropriate operating duration, illuminance, response and equipment arrangements must be established for each area.

TESTING & MAINTENANCE REQUIREMENTS

05 | Monthly functional checks

Routine short-duration functional tests should verify that emergency luminaires and illuminated exit signs operate when the normal supply is simulated as failed. The test should be long enough to check operation but should not unnecessarily discharge the batteries. Any defects must be recorded and acted upon.

06 | Annual full-rated-duration testing

A full-duration discharge test should verify that each relevant fitting or system remains operational for its **specified rated duration**—commonly three hours in industrial premises, but not universally. Check the required duration against the design and equipment specification. Allow sufficient recharge time afterwards and manage the period of reduced emergency-lighting resilience.

07 | Testing without disrupting production

Where practical, divide large industrial sites into planned test zones, coordinate with engineering teams and arrange safe temporary precautions. Simulating mains failure may affect normal lighting, so consider the safety of workers, forklift movements, machinery operation, loading bays and occupied routes. Do not compromise escape lighting while the system is discharged or recharging.

08 | Self-test and central systems

Automatic test systems can support scheduled testing and defect reporting, but they still require suitable oversight, records and corrective action. Central battery systems require checks of supply, battery condition, charging, distribution, indicators and system-specific operating procedures. Follow the manufacturer's instructions and applicable standards.

09 | Inspection and typical defects

Inspect damaged or obscured exit signs, failed batteries, defective drivers, damaged fittings, incorrect operating modes, inaccessible luminaires and changes in escape routes. Where high-level fittings are installed above production or racking, plan safe access and equipment isolation as necessary.

REPORTING, REMEDIALS & HANDOVER

10 | Recording and documenting tests

Maintain a current emergency lighting logbook or equivalent record of inspection dates, areas and fittings tested, test type, results, defects, repairs and retests. Plans and fitting identifiers help manage large sites. Record any limitations, inaccessible areas and deviations from the agreed scope.

11 | Failed fittings and corrective actions

Defects should be risk-assessed and rectified in a timely manner. A failed fitting may compromise an escape route or a high-risk work area. Where necessary, introduce temporary safety measures until the installation is restored. Following repair or replacement, carry out appropriate verification and update the records.

12 | Changes to industrial premises

Reassess emergency lighting following modifications to racking, partitions, production lines, mezzanines, escape routes or operating processes. A system that passed its last test may no longer provide suitable coverage after a layout change. Design assessment is distinct from routine functional testing.

INDUSTRIAL EMERGENCY LIGHTING COMPLIANCE CHECKLIST

Site assessment	Fire risk assessment, escape routes and high-risk areas reviewed
Asset information	Fitting locations, identifiers, system types and rated durations recorded
Monthly checks	Functional testing undertaken and results logged
Annual checks	Full-rated-duration test completed and recorded
Safe operations	Production, traffic routes and recharge periods considered
Defect control	Failures prioritised, remedied and retested
Change management	Alterations to layout or machinery trigger coverage review
Documentation	Test records, limitations and remedial history retained

QUEST Electrical: Planned emergency lighting testing, reporting and remedial works for operational factories, warehouses and industrial sites, with testing coordinated around production requirements.

Important: General guidance only, not a substitute for a site-specific fire risk assessment, emergency lighting design or advice from a competent person. Applicable standards and legal requirements should be confirmed for each project and UK jurisdiction.