Fire equipment: fire-fighting equipment and fire alarm call points along the escape route must be adequately illuminated at all material times.
Lifts and escalators: although lifts must not be used in the event of an emergency, they should be illuminated. Emergency lighting is required in each lift car in which people can travel. Escalators must be illuminated to the same standard as the escape route to prevent accidents.
Special areas: emergency lighting luminaires are required in all control rooms and plant rooms. In toilets, lobbies and closets exceeding 8 m^2 (or if less than 8 m^2 without borrowed light), escape lighting should be provided as if it were part of an escape route.
High-risk task area lighting: there are certain processes where there would be an increased risk to operators or other people near the task should the general lighting fail – for example, where there is high-speed machinery or exposed flame-heating operations. For such areas, *BS 5266* Part 7 requires that a maintained emergency lighting level of at least 10 per cent of the normal task illuminance be provided, with a minimum value of 15 lux.

3.8.6.5 Systems and calculations

The design aspects of conventional emergency lighting systems are discussed in detail in CIBSE *Technical Memoranda 12: Emergency Lighting*.

3.8.6.6 Maintenance and testing

The regular maintenance of emergency lighting equipment is essential to its correct operation. Generators will require periodic servicing of the prime mover, central batteries will require electrolyte checks, sealed batteries will need checking for loss of capacity, and the luminaires will require checking for correct operation and light output.

A maintenance and testing schedule should be prepared based on the recommendations of the equipment manufacturers and the requirements of *BS 5266* and the appropriate enforcing authority.

If central battery systems are used then it is necessary to follow *BS EN 50171 (2001) – Central Power Systems*.

3.8.6.7 Planning sequence

When planning an emergency lighting system, the following sequence will help.

(*a*) Define the exits and emergency exits.

(*b*) Mark the escape routes.

(*c*) Identify any problem areas, e.g. areas that will contain people unfamiliar with the building, plant rooms, escalators, fire alarm call points, fire equipment etc.

(*d*) Mark the location of exit signs. These can be self-illuminated or illuminated by emergency lighting units nearby. Mark these on the plan.

(*e*) Where direction signs are required, mark these and provide necessary lighting.

(*f*) Identify the areas of the escape route illuminated by the lighting needed for signs.