

- Maintenance and testing
- Planning sequence.

3.8.6.1 Escape lighting requirements

The *Building Regulations Approved Document B – Fire Safety* defines the types of building and areas within buildings requiring emergency lighting. This document refers to *BS 5266* as the standard to be used for the installation of escape lighting systems.

In addition, The Fire Precautions Act 1971 gives certain powers to local Fire Authorities that allows them to impose standards more onerous than those defined by *BS 5266*, and designers should verify the requirements of the appropriate Fire Authority when *designing* emergency lighting systems.

For certain applications, such as cinemas, theatres, lecture rooms and photographic darkrooms, the level of maintained emergency lighting and the luminance of signs must not adversely affect the primary use of the area.

BS 5266 incorporates, as Part 7, the full requirements of the European Emergency Lighting Standard, *EN 1838*.

3.8.6.2 Marking the route

All exits and emergency exits must have exit or emergency exit signs. Where direct sight of an exit is not possible, or there could be doubt as to the direction, then additional signs are required. These signs should comply with the Safety Signs Directive (92/58EEC) and be language-independent pictograms, although some Fire Authorities may require supplementary signs to *BS 5499*.

3.8.6.3 Illuminating the route

BS 5266 Part 1 requires that the centre line of permanently unobstructed escape routes up to 2 m wide should be illuminated to a minimum of 0.2 lux, but preferably to 1.0 lux, at floor level. Additionally, 50 per cent of the 2-m width should be lit to a minimum of 0.1 lux at floor level.

In larger areas where the escape route is not clearly defined, open area 'anti-panic' lighting should be provided, as detailed in *BS 5266* Part 7.

3.8.6.4 Other important factors

Speed of operation: emergency lighting must be provided within 5 s of the failure of the main lighting system. If the occupants are familiar with the building, this time can be increased to 15 s at the discretion of the enforcing authority.

Glare: in order to limit disability glare, luminaires should be placed at least 2 m above floor level. The luminous intensity of emergency luminaires should be controlled as required by *BS 5266* Part 7 Table 1 within a zone 60–90° from the downward vertical for level escape routes, and at all angles for other areas.

Exits and changes of direction: luminaires should be located near each exit door and emergency exit door, and at points where it is necessary to emphasise the position of potential hazards – such as changes of direction, staircases, changes of floor level and so on.