

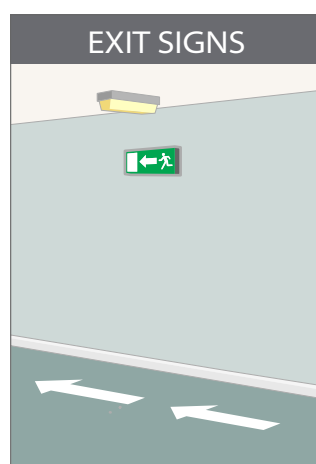
Emergency Lighting Design Guide

Step 1

Identify mandatory "Points of Emphasis" for the positioning of luminaires, examples as follows:



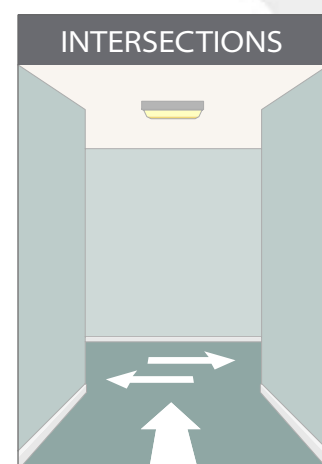
At each exit door



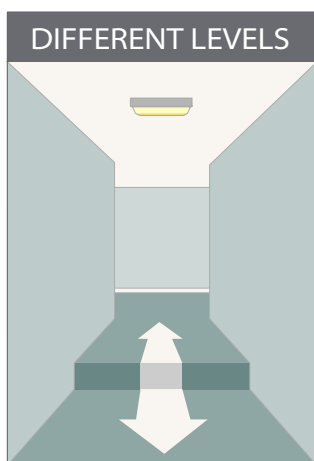
At all safety exit signs



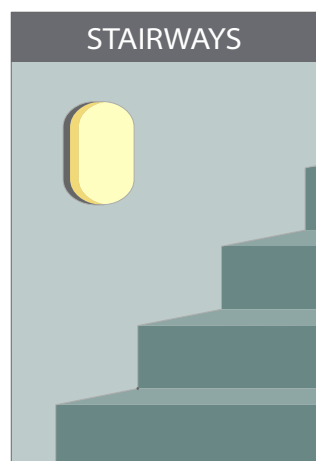
Within two metres of a change in direction



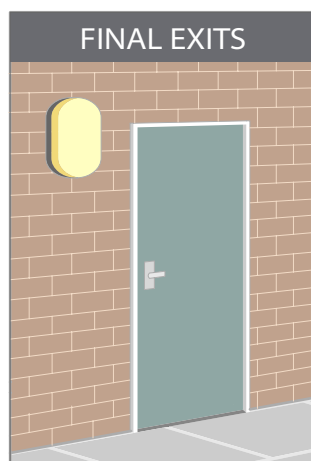
Within two metres of an intersection



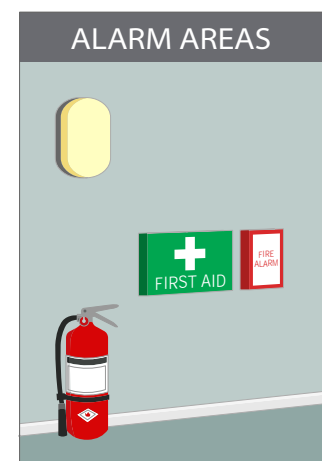
At a change of level



Within two metres of each staircase ensuring that each step is lit



Outside within two metres of each final exit door



Within two metres of fire alarms, first aid points and fire fighting equipment

Emergency Lighting Design Guide

Step 2

Ensure that the exit signs are the correct format and size

Signs which are provided at all exits intended to be used in an emergency and along escape routes shall be illuminated to indicate unambiguously the route of escape to a point of safety. Where direct sight of an emergency exit is not possible, an illuminated directional sign (or series of signs) shall be provided to assist progression towards the emergency exit.

Please note sign formats should not be mixed.



BS2560: 1975

Old-style signs now obsolete. Should have been replaced by December 1998



BS 5499 Pt 1

Acceptable but not recommended



European Signs Directive Format

This came into force on 1st April 1996

Maximum viewing distance:



Internally illuminated signs - 200 x the panel height

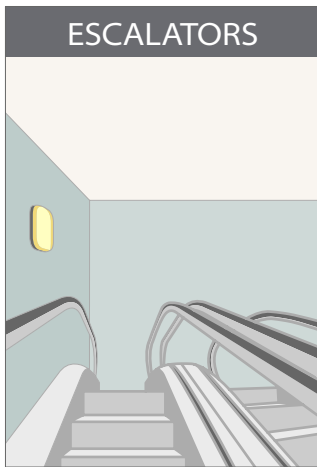


Externally illuminated signs - 100 x the panel height

Emergency Lighting Design Guide

Step 3

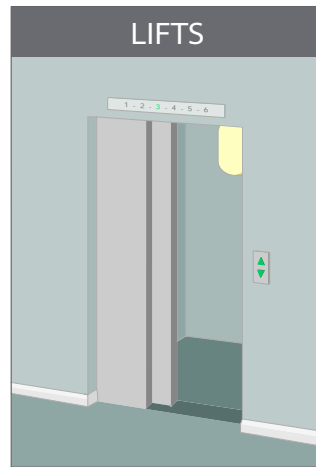
Locate emergency luminaires at the following essential areas:



Escalators should not be used as an escape route but requires illumination to protect users when power fails



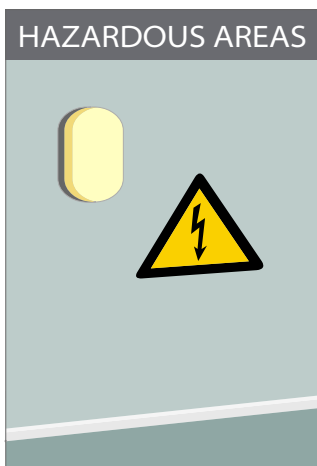
Install in all toilets exceeding 8 square metres or where natural light is not present



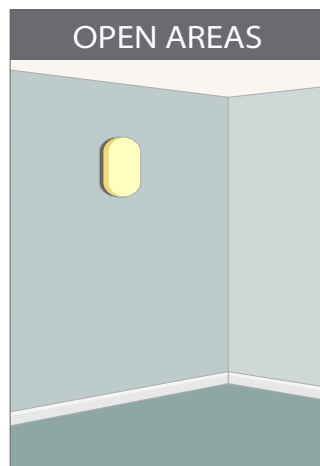
Emergency lighting to be provided in all lifts



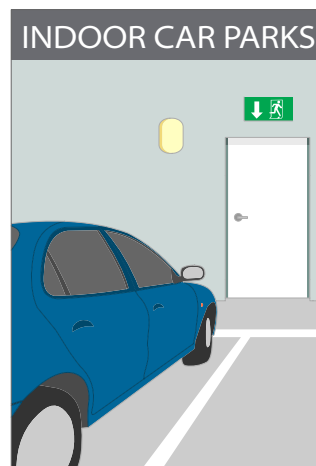
Motor generator, control and plant rooms for essential safety services



Areas of high risk should be illuminated to 10% of normal lighting level or 15 lux whichever is the greater



Open areas with either a particular hazard or an escape route passing through it when larger than 60 square metres



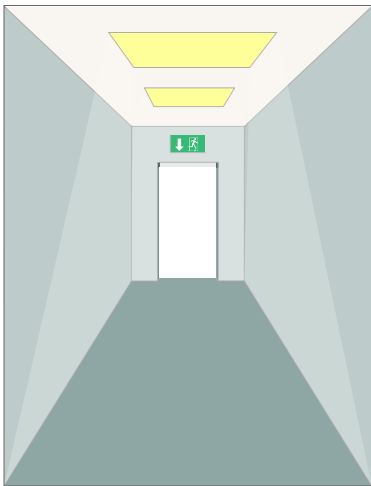
Covered car parks specifically escape routes

Emergency Lighting Design Guide

Step 4

When points of emphasis and essential areas are covered it is necessary to provide additional luminaires to ensure that the minimum illuminance level of 1 lux is achieved anywhere on the centre line of an escape route. A uniformity ratio of 40:1 maximum to minimum must not be exceeded.

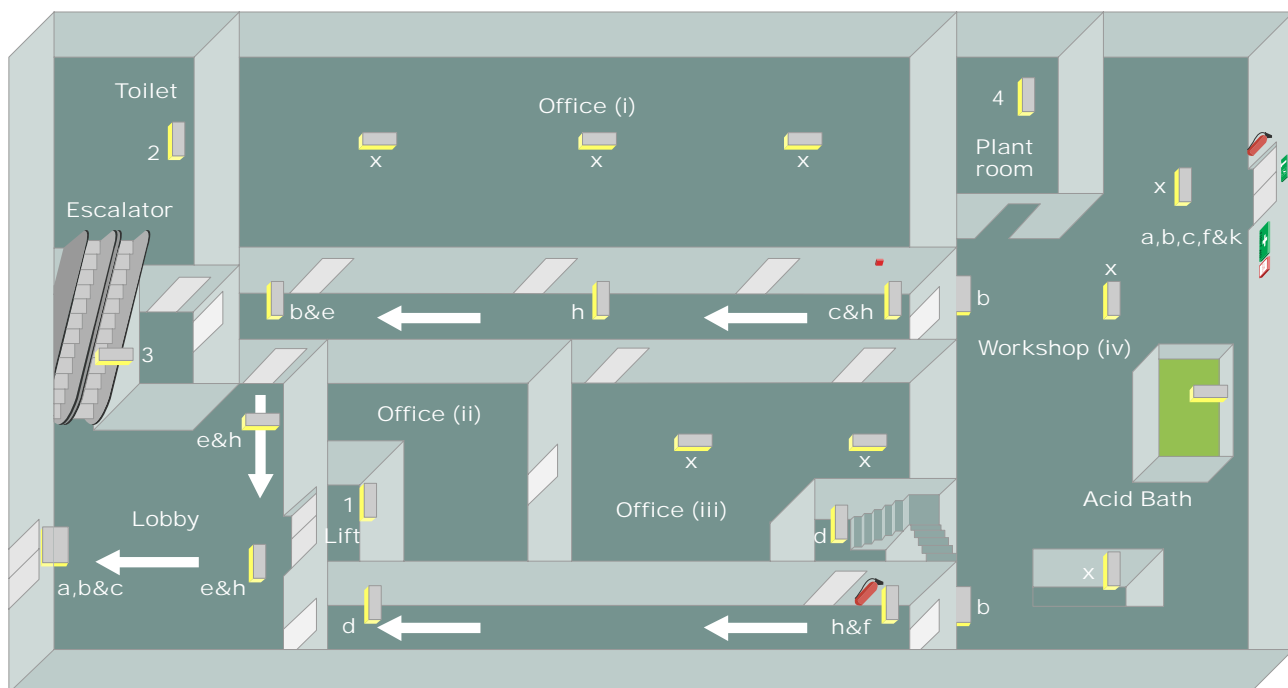
Please note: The UK has an "A deviation" which continues to allow a 0.2 lux minimum value for routes that are permanently unobstructed.



Step 5

For open (anti-panic) core areas larger than 60 square metres with an escape route passing through them a minimum lighting level of 0.5 lux should be provided. This excludes a 0.5 metre perimeter of the area

Example of Design System



Emergency Lighting Design Guide

Step 1

Locate luminaires at points of emphasis on escape routes.

- At each exit door (A)
- Illuminate exit and safety signs (B)
- Near call points (C)
- Near each staircase (D)
- Change of direction (E)
- Near fire fighting equipment (F)
- Change of floor level (G)
- Near intersections of escape routes (H)
- Outside final exits (I)
- Near first aid points (K)

Step 2

Check that the maximum viewing distances of the exit signs are not exceeded. Please note that for cinemas and theatres signs must be permanently illuminated whilst the building is occupied.

Step 3

Identify additional areas that require emergency lighting.

- Lift cars (1)
- Toilets greater than 8 square metres (2)
- Escalators (3)
- Motor generators, control and plant rooms (4)
- High risk areas (5)

Step 4

Check to ensure that minimum luminance levels are achieved on the escape routes.

Step 5

Check to that open areas greater than 60 square metres have a minimum luminance level of 0.5 lux. (X)

The information above is intended as guidance in meeting the design requirements of BS 5266 Part 7: 1999. It is important to check with the relevant local authority as some may impose additional requirements.

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