

Emergency Lighting Definitions

Anti-Panic (Open) Area Lighting

The part of Emergency Escape Lighting provided to avoid panic and provide illumination allowing people to reach a place where an escape route can be identified.

Ballast

The component that controls the operation of a lamp from a specified low or high voltage AC or DC source (Typically between 12 and 240 volts).

Ballast Lumen Factor

The ratio of the light output of the lamp in emergency operation compared with the light output of the same lamp operated by a reference ballast at its rated voltage and frequency.

Battery

Secondary cells providing the source of power during mains failure.

Battery - Recombination

A battery that is designed to recombine the electrolyte, constructed so that no provision is made for replacement of electrolyte (sometimes called sealed).

Battery - Vented

A battery that requires replacement of electrolyte at regular periods.

Battery Capacity

The discharge capability of a battery, being a product of average current and time, expressed as Ampere-hours (Ah) over a stated duration.

Note: At fast rates of discharge the full ampere hour capacity of the battery is not available.

Central Battery System

A system in which the batteries for a number of emergency luminaires are housed in one location. Usually for all the emergency luminaires on one lighting sub-circuit, but sometimes for all emergency luminaires in a complete building.

Combined Emergency Luminaire

A luminaire containing two or more lamps, at least one of which is energised from the emergency supply and the remainder from the normal supply (If the emergency lamp is only illuminated in a mains failure condition this luminaire is regarded for fire authority approval as non-maintained).

Design Voltage

The voltage declared by the manufacturer to which all the ballast characteristics are related.

Emergency Lighting

The lighting provided for use when the supply to the normal mains lighting installation fails.

Escape Route Lighting

Lighting provided to ensure that the means of escape can be effectively identified and safely used when a location is occupied.

Emergency Exit

The way out of a building, which is intended to be used at any time whilst the premises are occupied.

'F' Mark

Mark indicating that a luminaire is suitable for mounting on to normally combustible surfaces.

Final Exit

The terminal point of an escape route, beyond which point persons are no longer in danger from fire or any other hazard requiring evacuation of the building.

High Risk Task Area Lighting

Emergency lighting provided to ensure the safety of people involved in a potentially dangerous process or situation and to enable proper shut down procedures for the safety of the operator and other occupants of the premises.

Housing 850°C Test

Mandatory test for emergency luminaires used on escape routes, to establish that materials do not burn at given temperature. Self-extinguishing grades of plastic must be used, or alternatively glass and/or steel.

ICEL 1001 Registration

The industry standard for the approval of photometric performance and claimed data of emergency lighting equipment, which is tested by the British Standards Institute.

Illuminance (lux)

The luminous flux density at a surface, indicated in lm/m^2 .

Ingress Protection (IP) Number

Classification of the degree of protection a luminaire provides against the entry of solid foreign bodies and moisture

K Factor

The ratio of the light output from the lamp in its worst condition, normally at end of discharge and with any cable volt drop, to the output at nominal voltage.

Luminaire

Apparatus which distribute the light given by a lamp or lamps, including all the items necessary for fixing and protecting the lamps and for connecting them to the electrical supply.

Luminous Flux (lm)

The total light emitted by a lamp, measured in lumens.

Luminous Intensity (cd)

The power of a light source or illuminated surface to emit light in a given direction, measured in candela.

Lux

The unit of illuminance, equal to one lumen per square metre (lm/m^2)

Maintained Emergency Luminaire

A luminaire containing one or more lamps, all of which operate from the normal supply or from the emergency supply at all material times.

Mounting Height

The vertical distance between the luminaire and the working plane.

Note: For emergency lighting the floor is always taken to be the working plane.

Non-Maintained Emergency Luminaire

A luminaire containing one or more lamps, which operate from the emergency supply only upon failure of the normal mains supply.

Rated Duration

The manufacturers declared duration for a battery operated emergency lighting unit, specifying the time for which it will operate after mains failure. This may be for any reasonable period, but is normally one or three hours (when fully charged).

Rated Load

The maximum load which may be connected to the system which will be supplied for the rated duration.

Re-charge Period

The time necessary for the batteries to regain sufficient capacity to achieve their rated duration.

Room Index (K)

Index defining the relationship between the height, length and width of a room. Used for illuminance calculations.

Self Contained Emergency Luminaire

A luminaire or sign providing Maintained or Non-Maintained emergency lighting, in which all the elements such as battery, the lamp and the control unit are contained within the housing or within 1 metre of the housing.

Single Point Luminaire

See self-contained emergency luminaire.

Slave Luminaire

An emergency luminaire without its own batteries, which is designed to work in conjunction with a central battery system.

Standby Lighting

The part of emergency lighting which may be provided to enable normal activities to continue in the event of a mains supply failure.

Sustained Emergency Luminaire

See combined emergency luminaire.

Uniformity

The ratio between minimum illuminance (or luminance) to average illuminance (or luminance), usually measured at the working plane.

Utilisation Factor (UF)

The proportion of luminous flux emitted by a lamp (or lamps) which reaches the working plane.