



Fire Detection



Occupant Warning



Exit & Emergency Lighting



Fire Extinguishers



Fire Doors



Fire Hose Reels



Fire Hydrants



Fire Pumps



Gas Suppression



Sprinkler Systems



## EXIT & EMERGENCY LIGHTING



Exit & Emergency  
Lighting

## What Are Exit & Emergency Lights?

Exit and Emergency lighting impacts each facet of protocol in an evacuation; from crowd control and directional cues to hazard avoidance in stairwells, hallways and external grounds.

Staff, guests, building occupants and visitors should all be able to navigate their route out of a building in an emergency.

Exit and Emergency lighting is wired to the building's electrical supply and will commonly have its own dedicated electrical circuit for redundancy. All emergency lights are fitted with their own dedicated battery to function as a backup power supply for when the building loses power.

## Why Do Buildings Have Exit & Emergency Lights?

The Building Code of Australia volume 1 parts E4.0, E4.2, E4.4, E4.5, E4.6., E4.7 and E4.8 detail the mandatory requirement for exit and emergency lighting to be provided in various classes of buildings.

## Types Of Exit & Emergency Light Systems

### Traditional

Luminaires are wired together on circuits that connect to switchboards.

### Networked

A cabled system that communicates between fittings to a computer. This enables personnel to easily test the performance of the system from a central location. A visual inspection of each luminaire is still required to determine their physical condition

### Wireless Networked

Network technology providing reliable wireless communications throughout a building. This minimises the costs compared to traditional networked emergency lighting systems and supporting IT infrastructure.

Some systems have the lights and signs embedded with SIM cards to enable cellular communication to Cloud-based servers allowing seamless and reliable connections from the web interface to the emergency lights and other connected devices.

## Types Of Exit & Emergency Lights

### Non-Maintained

A non-maintained emergency luminaire operates only when the mains power fails.

### Maintained

A maintained emergency luminaire always operates, including from the battery when the mains fails. It will have a permanent supply and a switched supply which can be used to turn the lamp on or off during normal mains operation.

## Types Of Exit Lights

### Box

The controller incorporates the pictograph diffuser either on one side or both sides of the enclosure. They can be wall or ceiling mounted and can also be suspended by rods or wire.

### Blade

The pictograph diffuser is located below the controller, this provides a slim line look compared to the box design. On some models the controller can be recessed into the ceiling to deliver a more aesthetically pleasing outcome.

## Types Of Emergency Lights

### Disc

Disc lights are similar in style to recessed downlights. They are suitable for all commercial and interior applications such as apartments, shopping centres, hospitality, prisons and hospitals.

### Batten

Batten lights are similar to traditional fluorescent lighting used in offices and warehouses. They are available in a standard batten, weatherproof and vandal proof models.

### Oyster

Oyster lights are used in common areas where large amounts of illumination are required in a visually aesthetic form. They have a domed shaped diffuser.

### Flood

They have a general arrangement of two spotlights mounted on top of the control box. Commonly used in warehouses and other open spaces.



Exit & Emergency  
Lighting

## Where Should Exit & Emergency Lights Be Located?

Australian Standard AS/NZS 2293.1 Emergency lighting and exit signs for buildings (system design, installation and operation) provide designers, installers and certifiers of emergency lighting and exit signage schemes with the relevant requirements and guidance for the provision of emergency lighting and exit signs to all designated spaces within a building. This is to ensure an acceptable level of illumination for the safe evacuation of occupants from those spaces in an emergency.

Important design criteria are;

- Escape routes are clearly indicated with exit signs so there is no doubt as to the way out.
- Open areas used as an escape route are appropriately illuminated so that obstructions such as equipment or furniture can be avoided.
- Firefighting equipment can be readily located.
- High risk task areas have sufficient illumination to allow potentially dangerous processes to be shut down safely.

## How Do Exit & Emergency Lights Operate?

Upon failure of the electrical supply to the normal lighting in an area, irrespective of whether or not it is illuminated, each relevant emergency luminaire and exit sign shall be energised from its emergency supply.

At any time during the life of an installation, the duration of satisfactory operation on emergency power of every emergency escape luminaire or exit sign shall not be less than 90 minutes except where applicable building regulations specify a shorter minimum period.











## Maintenance, Inspection & Testing


Western Australia's building legislation requires owners of Class 2 to Class 9 buildings (which includes residential apartments) to ensure the building's safety measures are maintained. This is to ensure that safety systems remain capable of performing to a standard not less than they were originally required and commissioned to achieve.

There is a financial penalty for noncompliance with the building legislation. Penalties are imposed for non-compliance with the proper installation and maintenance of exit and emergency lighting, on building owners, building managers and employers.

Exit and emergency lighting must be tested every six months in accordance with AS/NZS2293.2. There is an additional inspection and test checklist required to be undertaken yearly.




ROUTINE SERVICE FREQUENCIES	Monthly	Three Monthly	Six Monthly	Yearly	Five Yearly	Ten Yearly	Twenty Five Yearly	Thirty Yearly
 Fire Detection	✓		✓	✓	✓			
 Occupant Warning	✓			✓	✓			
 Exit & Emergency Lighting			✓	✓				
 Fire Extinguishers			✓	✓	✓			
 Fire Doors		✓ <small>Horizontal Sliding Doors</small>	✓	✓				
 Fire Hose Reels			✓	✓				
 Fire Hydrants	✓ <small>Where Pumpsets Fitted</small>		✓	✓	✓			
 Fire Pumps	✓		✓	✓	✓			
 Gas Suppression	✓		✓	✓		✓		
 Sprinkler Systems	✓		✓	✓	✓	✓	✓	✓



**Design**

We design solutions, tailored to your building.




**Installation**

Our installation teams are focused on delivering on time and on budget projects.



**Service & Maintenance**

We offer regular servicing and maintenance to ensure that your systems are working at their optimum level.



**Emergency Call Out**

The Emergency Call Out Service ensures that you are covered 24 hours, 7 days a week for fault and emergency.



**Fire Safety Training**

We deliver training courses to ensure your team has the knowledge to act competently during an emergency.



The information provided in this document is general in nature, every installation is different and requires site specific professional guidance. Westside Fire Services assumes no responsibility or liability for any errors or omissions in the content of this document. The information contained in this document is provided on an "as is" basis with no guarantees of completeness, accuracy, usefulness or timeliness.

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