



**Clevertronics**



# **SIMPLIFYING EMERGENCY LIGHTING AND EXITS**

for Residential Aged Care



## Does your Residential Aged Care facility comply to the regulatory requirements for emergency lighting?

### Why is Emergency Lighting Essential?

Emergency lighting, including exit and emergency luminaires, ensures that occupants can safely exit a building when the normal lighting fails due to power loss or other emergency events. Each luminaire is equipped with a battery and must provide light for at least 90 minutes after a power outage.

### Where is Emergency Lighting Required?

The National Construction Code (NCC) in Australia and the New Zealand Building Codes F6 & F8 specify the classes of buildings and areas where emergency lighting is required. In general, any government or commercial building occupied by employees, customers, or the public, as well as common areas of multi-residential buildings, must have emergency lighting.

### Where Are Emergency Lights Installed?

Exit signs must be clearly visible and illuminated at all times. They should be placed above exit doors, at the top of staircases, and at any directional changes to guide occupants along the “egress path” to a final exit or evacuation point.

Emergency lights should be installed at regular intervals to illuminate the egress paths. The specific placement of these lights depends on the type of light fitting, building shape, and ceiling height.

## Key Regulations to Follow

To ensure a safe environment and avoid significant penalties, it is crucial to meet the minimum legal requirements outlined by the standards:

- ✓ : Emergency lights must operate for at least 90 minutes on battery power
- ✓ : Exit lights must be tested every six months to ensure they are functioning correctly
- ✓ : Emergency lights need to be cleaned annually to maintain optimal visual performance
- ✓ : A status LED indicator is required to verify that the light is charged and operating correctly
- ✓ :
  - Floor areas must maintain a minimum light level of 0.2 lux
  - Isolated darker areas require a minimum light level of 1.0 lux
- ✓ : Record and document all test results, defects, and maintenance in a logbook



# Simplified Emergency Lighting Solutions for Residential Aged Care

Recognising the intricacies of aged care facilities, from the unique needs of residents to strict health and safety regulations, underscores the crucial role of reliable emergency lighting systems. In such environments, where safety is paramount and compliance is essential, Clevertronics offers tailored solutions. These are designed to simplify adherence to emergency lighting standards and reduce maintenance requirements, ensuring operational efficiency and the safety of residents and staff.



## Clevertronics Product Range



Exits



Dynamic Exits



Emergency Lights



Battens



Circulars & Bulkheads

## Partners in Compliance

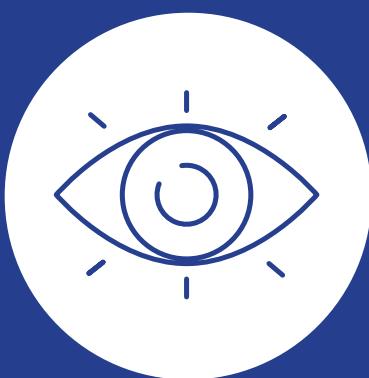


Calvary

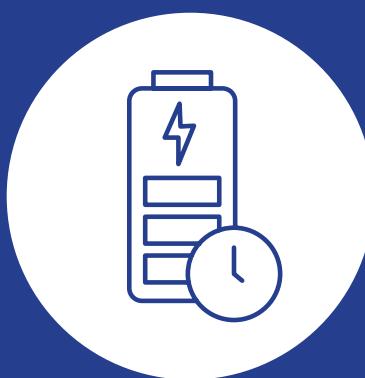
Estia Health



**We understand** your environment  
and our products are **built and  
designed for these conditions**



Our exit signs feature enhanced visibility, ensuring clear guidance in aged care facilities for residents with low vision



### LONG SERVICE LIFE

Our long-life lithium batteries are designed to maximise intervals between maintenance and ensure consistent operation



We are with you through the life of your facility. From design, installation, maintenance and replacement. Our team will assist you with your specific requirements.



## The **ultimate cost-effective emergency lighting solution** for your needs



## Zoneworks Hive & L10 Lithium Nanophosphate

Together, Clevertronics Zoneworks Hive & L10 Lithium Nanophosphate products, deliver the ultimate cost-effective solution for Residential Aged Care.

- Designed for 12+ year maintenance free operation
- 10-year warranty including batteries
- World's most advanced emergency lighting system
- Reduction in energy costs and carbon footprint
- Tested to AS/NZS 2293.3
- Easy installation as project or upgrade
- Lifetime Technical Support



\* Please check out our website for more details on our LTS program <https://clevertronics.com.au/lifetime-technical-support>





**L10 Lithium Nanophosphate range** has completely revolutionised the global emergency lighting market by improving the maintenance free service life of emergency lighting from 4 years to 12+ years.

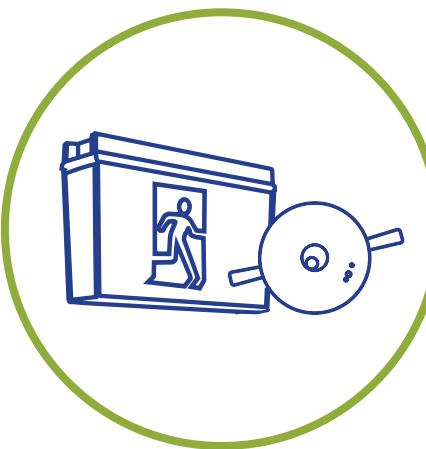
L10 ensures a compliant emergency lighting solution without the maintenance cost burden and high carbon footprint of others. Reduce your emergency lighting costs by 80% with L10 Nanophosphate, it's that simple.



Zoneworks Hive



# Outcomes of a in your Residential Aged Care

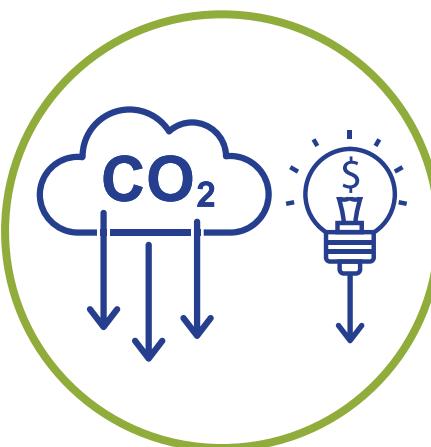


## **COMPLETE SOLUTION**

A complete and compliant standard and emergency lighting system, including circulars, battens, exits and emergency lights, designed in line with the latest standards as per AS/NZS 2293.3 and AS/NZS 60598.1



A testing and monitoring system that automatically initiates the required 6-monthly function and annual discharge tests, which can be programmed at times which are least disruptive to residents



## ENERGY & CARBON REDUCTION

12-year maintenance-free exit and emergency lights with a 10-year warranty to reduce the need for ongoing maintenance and replacements

A reduced energy and carbon footprint from low energy LED lights and long-life Lithium Nanophosphate<sup>©</sup> battery technology

## SAFETY & COMPLIANCE

Peace of mind knowing your Residential Aged Care has addressed the legal requirements for a safe and compliant emergency lighting system

## Clevertronics Invisible Graphic Emergency Exit Blade for Dementia Residents

The Clevertronics Invisible Graphic Emergency Exit Blade is specifically designed to address the unique challenges of residential aged care facilities. This innovative product is crafted to ensure the safety of residents, particularly those with dementia or other mental disabilities, by eliminating unnecessary distractions and confusion during normal operations.



- **Discreet Design:** Automatic
- **Illumination:** Enhanced Safety
- **Regulatory Requirements:** Manually switched version available on request



## Clevertronics Exits



Product	Description	IP Rating	IK Rating	ZW Hive
<b>1 Cleverfit Pro (24m)</b>	Slimline exit with slide connect steel bracket for easy install. Suits both wall or ceiling mount	IP20	-	✓
<b>2 Ultrablade Pro Recessed (24m)</b>	Ceiling recessed mounted, low profile, blade style exit, designed for architectural requirements	IP20	-	✓
<b>3 Ultrablade Pro Surface Mount (24m)</b>	Surface mounted, low profile, blade style exit, designed for architectural requirements	IP20	-	✓
<b>4 Form (20m)</b>	Featuring an elegant and size optimised anodised aluminium frame, the Form is a versatile architectural solution available in multiple configurations	IP20	-	✓
<b>5 Weatherproof (24m)</b>	Robust and weatherproof exit designed for wall or ceiling mount applications	IP66/67	IK10	✓
<b>6 Invisible Graphic (24m)</b>	Recessed or Surface Mounted, invisible graphic exit blade	IP20	-	✓



# Case Study



## **Uniting**

### **Background**

Uniting Aldersgate is a comforting aged care home in Lilyfield, in the heart of Sydney's vibrant inner west.

GHD was appointed by Stephen Edwards Constructions to undertake a fire engineering assessment for this home and appointed Clevertronics to deliver Emergency Lighting with **CleverEVAC Dynamic Signage**.

### **The Challenge**

An edge-case scenario had arisen regarding the location and usage of an external fire egress stairway due to the site constraints. The external stairs could become unsafe during particular fire scenarios involving the underground carpark and/or the bedrooms and rooms near the egress. A solution was needed to assist in directing building occupants to an alternative exit.

### **The Solution & Result**

GHD had developed a Fire Engineering Performance Solution design which utilised the functionality of the CleverEVAC exit signage system.

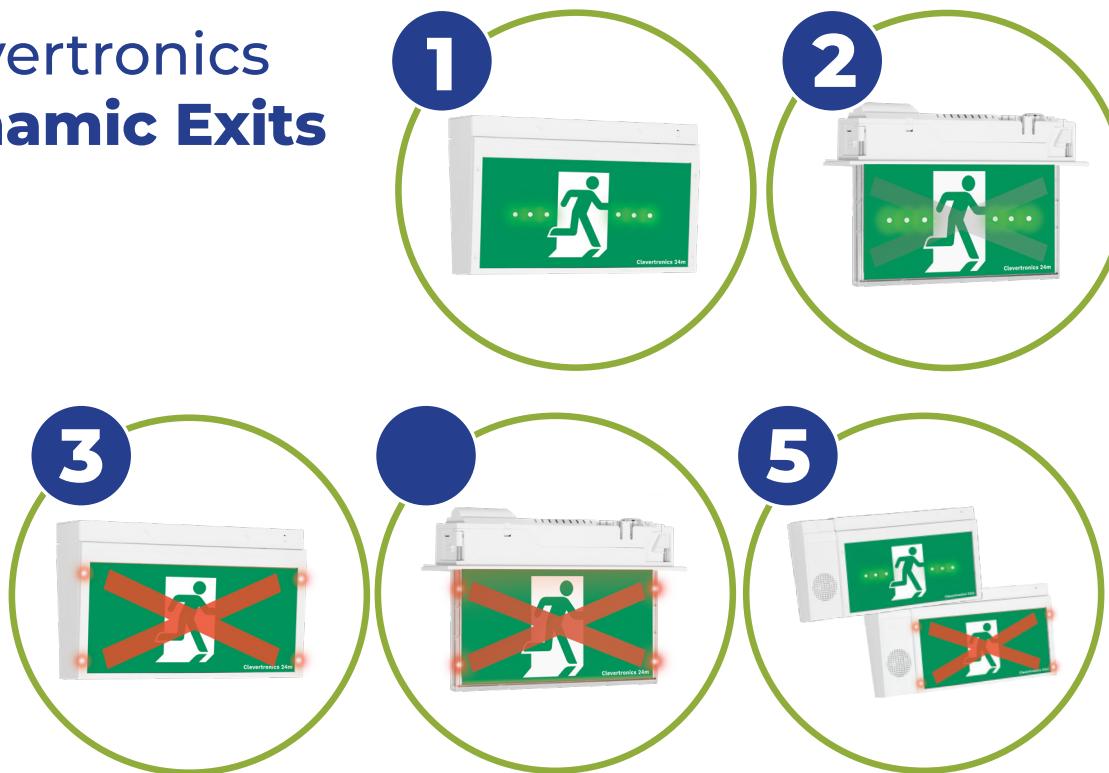
In the scenario where a fire event occurred in the immediate vicinity of the stairwell, the Dynamic Signage helps to guide staff and residents towards an alternative exit, away from the affected stair, using both positive and negative reinforcement.

This was achieved using a combination of Dynamic RED X and Dynamic GREEN signage, as shown on the next page.

The research on dynamic signage carried out by the Fire Safety Engineering Group (FSEG) at the University of Greenwich, UK, was a contributing factor to the choice made by GHD engineers to include Dynamic EXIT signage to support the egress solution.

The outcome of the solution was a successful application, installation and commissioning of the CleverEVAC Dynamic EXIT signage solution. It had mitigated the need to undertake additional design and remedial works which would have been required to address the edge-case scenario.

## Clevertronics Dynamic Exits



Product	Description	IP Rating	IK Rating	ZW Hive
1 CleverEvac Dynamic Green	Displays illuminated green arrow, when activate, to enhance exit path	IP20	-	✓
2 CleverEvac Dynamic Green Blade	Blade style exit, displays illuminated green arrow, when activate, to enhance exit path	IP20	-	✓
3 CleverEvac Dynamic Red X	Displays red cross when activated to alter those evacuating to seek alternative exit. Also has Dynamic Green function	IP20	-	✓
4 CleverEvac Dynamic Red X Blade	Blade style exit, displays red cross when activated to alter those evacuating to seek alternative exit. Also has Dynamic Green function	IP20	-	✓
5 CleverEvac SoundEscape	Broadcast audible location sounds such as 'Exit Here'. Available with Dynamic Green & Dynamic Red	IP20	-	✓

**CleverEVAC** is a system and suite of dynamic and adaptive EXIT signs that provide increased visibility, audible cues, and negative enforcement options. Dynamic mode is triggered either by a 24VDC or voltage free open/close signal from the fire detection or other building safety system.

# Clevertronics Emergency Lights



Product	Description	IP Rating	IK Rating	ZW Hive
1 <b>Lifelight Pro Recessed</b>	Recessed mounted, lithium powered LED emergency	IP20	-	✓
2 <b>Lifelight Pro Recessed Splashproof</b>	Splash resistant, recessed mounted, lithium powered LED emergency light	IP44	-	✓
3 <b>Lifelight Pro Surface Mount</b>	Surface mounted, lithium powered LED emergency	IP20	-	✓
4 <b>Lifelight Pro Surface Mount Weatherproof</b>	Weatherproof, surface mounted, lithium powered LED emergency light	IP65	-	✓
5 <b>Supalite</b>	LED emergency flood light with dual swivel heads	IP20	-	✓
6 <b>Supalite Weatherproof</b>	Weatherproof LED emergency flood light with dual swivel heads	IP65	-	✓

\* Lamp head only

## Battens & Circulars



Product	Description	IP Rating	IK Rating	ZW Hive
<b>1</b> <b>Circlite</b>	All new sleek design featuring switchable colour and optional sensor	IP20	-	✓
<b>2</b> <b>Circlite Emergency</b>	Lithium powered All new sleek design featuring switchable colour and optional sensor	IP20	-	✓
<b>3</b> <b>Epic Indoor</b>	Indoor batten range featuring switchable color and optional sensor	IP20	-	✓
<b>4</b> <b>Epic Indoor Emergency</b>	Lithium powered indoor batten range featuring switchable color and optional sensor	IP20	-	✓
<b>5</b> <b>Argonaut Plus</b>	High efficacy, switchable colour and dual output	IP65	IK08	✓
<b>6</b> <b>Argonaut Plus Emergency</b>	Lithium powered emergency, high efficacy, switchable colour and dual output	IP65	IK08	✓

**Clevertronics Battens, Circulars, & Bulkheads are available in both emergency and standard lighting configurations**

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