



SIMPLIFYING EMERGENCY LIGHTING AND EXITS

for Residential Aged Care



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

In Australia and New Zealand, regulatory requirements for emergency lighting are defined by several standards and building codes. These requirements ensure the safety of building occupants by providing adequate lighting during power failures or other emergencies.

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:

- ✓ **Battery Duration:** Emergency lights must operate for at least 90 minutes on battery power
- ✓ **Regular Testing:** Exit lights must be tested every six months to ensure they are functioning correctly
- ✓ **Annual Maintenance:** Emergency lights need to be cleaned annually to maintain optimal visual performance
- ✓ **Charging Confirmation:** A status LED indicator is required to verify that the light is charged and operating correctly
- ✓ **Brightness & Coverage Requirements:**
 - 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 Keeping:** 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.



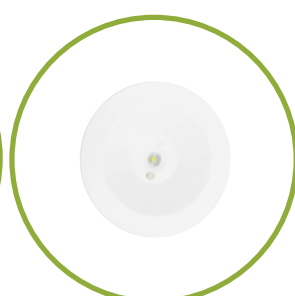
Clevertronics **Product Range**



Exits



Dynamic Exits



Emergency Lights



Battens



Circulars & Bulkheads

Partners in Compliance



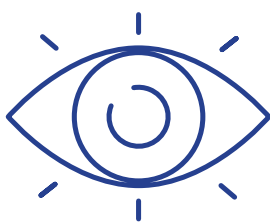
Calvary



Estia Health



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



ENHANCED VISIBILITY

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



HASSLE-FREE COMPLIANCE

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

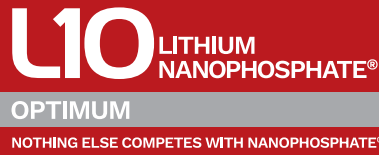
Together, Clevertronics Zoneworks Hive & L10 Lithium Nanophosphate products, deliver the ultimate cost-effective solution for Residential Aged Care.

- 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 is the world's most advanced emergency lighting system with over 4000+ sites installed across the UK, Australia and New Zealand.

Zoneworks Hive simplifies the system backbone installation and maintenance to only a single RF controller required for every 1000 fittings. Dynamic Self-Managed meshing allows scalability to 10's of thousands of fittings simple, faster and more reliable.

- Remote or on-site testing and monitoring
- Web-based interface and reporting includes maintenance log and full test results
- Complimentary Lifetime Technical Support

Outcomes of a **world-class compliant emergency lighting solution** in your Residential Aged Care



COMPLETE SOLUTION

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



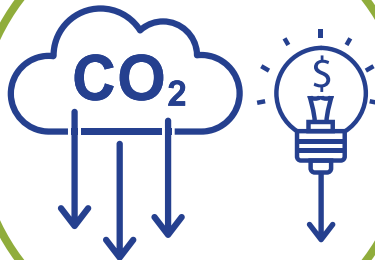
SIMPLIFICATION

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



PEACE OF MIND

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



ENERGY & CARBON REDUCTION

A reduced energy and carbon footprint from low energy LED lights and long-life Lithium Nanophosphate® 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.



Key Features:

- **Discreet Design:** During regular operation, the Invisible Graphic Emergency Exit Blade appears unilluminated, blending seamlessly with its surroundings. This design prevents residents from being distracted or confused by exit signs during normal activities.
- **Automatic Illumination:** In the event of a power outage or emergency, the exit sign immediately illuminates, providing clear and effective guidance to the nearest exit. This ensures that residents can easily find their way to safety when it matters most.
- **Enhanced Safety:** By only illuminating in emergencies, the sign reduces the risk of residents with cognitive impairments inadvertently attempting to exit the building under normal conditions.
- **Regulatory Requirements:** Developed as a performance-based solution, the Invisible Graphic Emergency Exit Blade can be certified by a fire engineer to meet project-specific compliance requirements. This tailored approach provides design flexibility and confidence that every installation meets the highest safety standards.

The Clevertronics Invisible Graphic Emergency Exit Blade is an essential safety feature for residential aged care facilities, providing a thoughtful solution that prioritises the well-being and safety of vulnerable residents.

Clevertronics Exits

1



2



3



4




5



6



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



Case Study

Dynamic Exits in United Aldersgate



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.

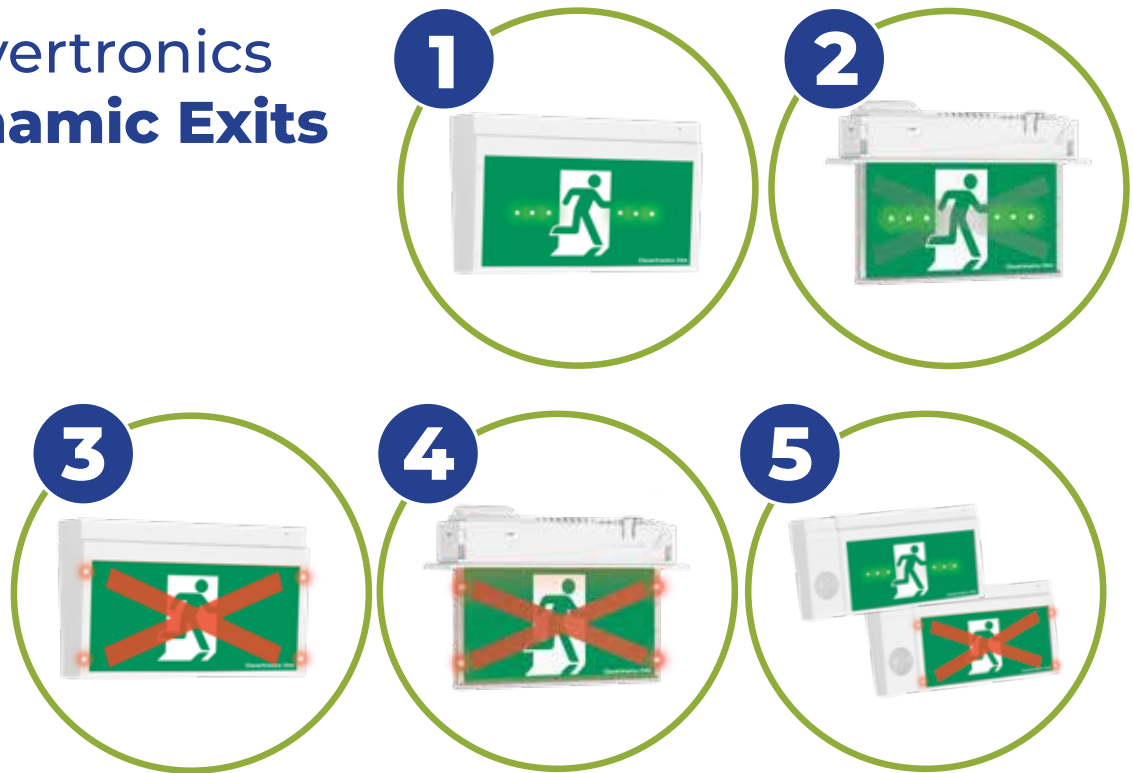
In the scenario where a fire event occurred in the immediate vicinity of the stairwell, the Dynamic Signage helps to guide staff and residents towards an alternative exit, away from the affected stair, using both positive and negative reinforcement.

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	Lifelight Pro Recessed	Recessed mounted, lithium powered LED emergency	IP20	-	✓
2	Lifelight Pro Recessed Splashproof	Splash resistant, recessed mounted, lithium powered LED emergency light	IP44	-	✓
3	Lifelight Pro Surface Mount	Surface mounted, lithium powered LED emergency	IP20	-	✓
4	Lifelight Pro Surface Mount Weatherproof	Weatherproof, surface mounted, lithium powered LED emergency light	IP65	-	✓
5	Supalite	LED emergency flood light with dual swivel heads	IP20	-	✓
6	Supalite Weatherproof	Weatherproof LED emergency flood light with dual swivel heads	IP65	-	✓

* Lamp head only

Clevertronics Battens & Circulars



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

Victoria

1 Caribbean Drive
Scoresby VIC 3179
Phone: +61 3 9559 2700
Fax: +61 3 9559 2799

New South Wales

9 Distribution Place
Seven Hills NSW 2147
Phone: +61 2 8805 6400
Fax: +61 2 8805 6444

Queensland

2/8-12 Monte-Khoury Drive
Loganholme QLD 4129
Phone: +61 7 3442 9700
Fax: +61 7 3442 9777

Western Australia

12 Milly Court
Malaga WA 6090
Phone: +61 8 9207 0000
Fax: +61 8 9248 3725

South Australia

Unit 1, 136 Mooringe Ave
North Plympton SA 5037
Phone: +61 8 8301 8800
Fax: +61 8 8351 8286

Auckland

Unit 22/761 Great South Road
Penrose Auckland 1061
Phone: +64 800 548 448

Christchurch

163C Wordsworth Street
Sydenham Christchurch 8023
Phone: +64 800 548 448

United Kingdom

4 Longwalk Road
Stockley Park
Uxbridge UB11 1FE
Phone: 01895 430 255

clevertronics.com.au

clevertronics.co.nz

clevertronics.co.uk