

# Case Study

## The Background

The development at **100 Talavera Road, Macquarie Park** is a landmark high-rise, mixed-use residential project comprising **three residential towers across 61 storeys**. With over **500 CleverEVAC Dynamic GREEN exit signs** installed, the project integrates Zoneworks HIVE for intelligent monitoring and control. Installation occurred in Q1–Q2 2025, with commissioning completed in Q3 2025. Final project completion is pending.

The fire safety engineering for the site was led by **Scientific Fire Services**, who approved the performance-based solution involving CleverEVAC Dynamic GREEN exit signage.

## The Challenge

The site presented a significant fire safety challenge due to extended travel distances in the nine basement parking levels and plant areas, which exceeded the Deemed-to-Satisfy (DtS) provisions of the National Construction Code (NCC). A performance solution was required to ensure safe egress for occupants.

Additionally, the project required a system capable of mass activation of Dynamic GREEN mode across hundreds of exit signs, with real-time feedback to the fire detection system to ensure full operational integrity during emergency events.

## The Solution

Scientific Fire Services specified CleverEVAC Dynamic GREEN exit signage as a performance-based solution to enhance visibility and wayfinding in complex areas. This decision was supported by research from Professor Ed Galea (Fire Safety Engineering Group), which demonstrated improved detection and reduced decision-making time with Dynamic Exit Signs.

**To support the signage system, Zoneworks HIVE was deployed to enable:**

- Wireless integration with the fire detection system for site-wide Dynamic GREEN activation.
- Automated testing and monitoring of all Dynamic Exit Signs.
- Real-time status reporting to alert building management of any fittings that fail to activate.

The CleverEVAC Dynamic GREEN system is BCA Codemark certified, ensuring compliance with NCC despite deviations from AS/NZS 2293.3 due to the use of brighter, sequencing LEDs.

### Project Name

Dynamic Green Project

### Location

100 Talavera Road,  
Macquarie Park, NSW

### Industry Application

High-rise, mixed-use  
residential development.

### Project Type

New Emergency Lighting  
Installation

### Year

2025

### Number of Fittings

500+ Dynamic Green Fittings

### Battery Type

Lithium (LP)

### Monitoring

Zoneworks HIVE

### Fire Safety Engineer

Scientific Fire Services

### Product Range

CleverEVAC Dynamic Green  
Cleverfit PRO Exit Signage



# The Result

The successful commissioning of the Dynamic GREEN Exit system at 100 Talavera Road demonstrates the effectiveness of performance-based fire safety design. The solution not only addressed the extended travel distances but also delivered a highly visible, intelligent, and compliant emergency lighting system.

The integration of Zoneworks HIVE allows for future upgrade of the remaining emergency lighting throughout the site, which will ensure ongoing reliability, simplified maintenance, and enhanced safety for occupants, setting a benchmark for future high-rise developments.

## Key Highlights

- Improved Visibility & Wayfinding
- Brighter, sequencing LEDs in Dynamic GREEN signs make exits easier to locate, especially in complex areas like car parks and plant rooms.
- Faster Evacuation Decision-Making
- Research-backed design helps occupants make quicker decisions during emergencies, enhancing overall safety.
- Codemark Certified Compliance - ensures the system meets NCC performance requirements, even with deviations from standard emergency lighting codes.
- Smart System Integration
- Wireless activation and real-time feedback to the fire system allow for site-wide control and monitoring during fire events.
- Automated Testing & Maintenance
- Zoneworks HIVE simplifies compliance with automated testing and alerts for any faults, reducing manual effort and improving reliability, also ensuring integrity of the fire engineer's performance solution.



Talavera Road High Rise Triple

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