

# Case Study

## The Background

**Built in 1986, Martin Wilson Primary School is part of the Shropshire Council's educational establishment providing a welcoming and nurturing learning environment for children from 3 to 11 years of age.**

**Moving through the years, the school has the capacity to educate 234 pupils and has always prided itself in thinking about the atmosphere it's students and staff experience, which means upgrading and installing new systems and services as and when they can with health and safety being a core concern.**

In January 2020, Clevertronics were contacted by the Property Services Group (PSG) of Shropshire County Council as they were experiencing issues with technologies and systems that were currently installed across their estate. After careful consideration, they decided that Martin Wilson Primary School would be a great site to install, test and trial the myriad of systems, services, and products that Clevertronics could offer enabling them to continue to meet emergency lighting compliance regulations.

## The Challenge

Clevertronics were asked to suggest applicable systems to replace their existing emergency lighting and exit signage, as one of the main challenges that the Council faced was failing, older battery technologies across their whole estate.

Nathan Davies, Senior Electrical Surveyor for PSG Shropshire Council said, "One of the main reasons for contacting Clevertronics was because we wanted to understand what new products and technologies were out in the marketplace to help them increase their efficiencies and also remain compliant." Continuing, Nathan said "We had heard that Clevertronics were now in the UK educating the market about using lithium battery technology in emergency lighting fittings which upgrades and replaces older and less efficient products, also increasing the lifetime of the overall solution.

Once we had received a demo of the Zoneworks XT HIVE system, it was clear to us that by proceeding with the

### Project Name

Martin Wilson Primary School

### Location

Oxford, United Kingdom

### Industry Application

Education

### Project Type

Existing Emergency Lighting Upgrade

### Year

2020 Ongoing

### Number of Fittings

121

### Contractor

Powercor

### Product Range

L10 Lithium Nanophosphate

### Testing System

Zoneworks XT HIVE

“

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installation would save time and money by not having to carry out the monthly and annual flash and duration tests. By selecting the L10 batteries we could also eliminate the annual expenditure on battery replacement, as we believe that continually changing batteries is not the best use of the property's resources."

Other challenges that also came with the project included the need to choose efficient light fittings, help reduce maintenance costs and look at ways to monitor and test the emergency lighting system so they can continue to meet regulatory compliance needs and reduce energy.

## The Solution

We have split the solution for this education project into three key areas.

### Maintenance Costs:

With the estates emergency lights and batteries continually failing the customer specified and upgraded to the Clevertronics L10 Range of emergency luminaires which include Lithium Nanophosphate® technology.

This range of products has a battery with a design life of over 12 years returning over 80% maintenance costs over traditional battery (Nickel Cadmium) technologies ensuring maintenance reductions and sustainability goals were met. Clevertronics also offers a free lifetime support program for their HIVE system, for details contact Clevertronics UK.

### Monitoring, Testing and Compliance:

Being able to remotely monitor and test the emergency lighting system was an objective that was easily met using Zoneworks XT HIVE, a system that uses the latest in 2.4GHz RF technology with Dynamic Self-Managed Meshing. The XT HIVE system enables remote commissioning of any project, monitors all products 24/7 and can schedule tests in line with the latest standards –either from a central destination, or on the move

### Energy Reduction:

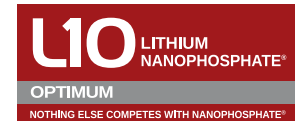
LED technology was used to replace outdated compact fluorescent fittings enabling an energy reduction of approximately 80%. A list of the products used can be found in the project overview section.

## The Result

The customer is extremely happy in terms of how the system was installed and is currently operating. Even with the COVID-19 pandemic hitting the team midway through the project it did not stop the system being installed and commissioned. As Allan Dunderdale, Regional Sales Manager Midlands, mid and South Wales says "We couldn't believe what was happening with COVID-19, but luckily our Zoneworks XT HIVE system can literally be centrally commissioned and managed from a distance so we could continue and complete the project for the customer. Even COVID-19 couldn't stop us!"

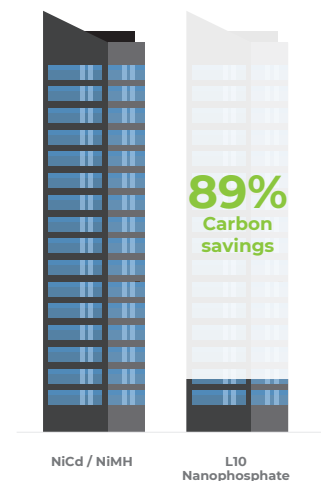
## Find Out More

**Martin Wilson Primary School is another quality project delivered by Clevertronics. If you would like further information about this case study or are interested in understanding more about Emergency and Exit lighting within your building, contact Clevertronics for a site audit, demonstration, and cost analysis report.**



### Sustainability: Carbon Impact

**L10 Nanophosphate and Zoneworks XT HIVE can reduce carbon emissions by up to 89%**



\* Findings based on recent AECOM carbon study on the use of emergency lighting products in buildings.