



THE WALNUTS SCHOOL, HAZELEY

THE BRIEF

The Walnuts School is a community residential special school and Children's Home currently catering for 175 pupils from Foundation to Year 14. All pupils are on the autistic spectrum or have social communication difficulties as such the learning environment is vitally important.

The Walnuts Schools light quality was degrading due to constant failures of the existing lighting. This negatively impacted the learning environment and caused maintenance costs to rise. This was causing distress to the pupils of the school and site team. The school had the following key requirements:

Improve the light quality – Provide a compliant LED & emergency lighting solution which meets current lighting and emergency regulations. Ensure the solution delivered light quality of different colour temperatures for the specific environment to assist with classroom concentration and relaxation in social areas.

Reduce operating costs – Significantly reduce energy costs and maintenance costs. Safeguarding against future capital expenditure of wholesale lighting replacement by selecting a long life solution from a reputable UK lighting manufacturer with robust warranties.

Reduce Carbon Footprint – Improve the schools environmental credentials by reducing the energy consumption of the school and carbon footprint.



THE SOLUTION

The Walnuts School selected INECO Energy as their solutions partner to deliver an energy efficient LED lighting solution utilising products manufactured by Dextra lighting. INECO Energy were selected because of their unique approach to delivering energy efficient lighting solutions to schools. INECO Energies 'designed for efficiency' methodology ensures that schools benefit from the optimum light levels with the least resource to deliver the greatest returns.

INECO Energy's 'design for efficiency' methodology includes a complete investment grade energy audit, lighting survey and bespoke lighting design to ensure the lighting solution met the required CIBSE guidelines and British Standards. The school were able to benefit from significant improvements to the learning environment and operating cost savings with no cost to the school due to a government funding initiative.



INECO Energy provided an end-2-end solution, minimising disruption by installing the school block over 5 nights whilst the residential block was completed during 5 working days. INECO Energy assisted Milton Keynes Council and the Walnuts School to successfully guided them through the Government funding application process, surveying, designing, installing, measuring & verifying the energy saving LED lighting upgrade project.

Milton Keynes Council independently measured the pre and post electrical load to determine the actual energy saving. The circuit level monitoring showed that above estimated 71% energy savings were achieved, saving the school 46.6 tonnes of carbon and £12,446 of electricity bill savings in year 1.

"As the Site Manger I thought I would have to right off 3 weeks of my life during the installation, Wow was I surprised. The whole process from survey/design, installation to completion was totally professional and stress free. The installation team were extremely accommodating and friendly, listening to us and working around the special needs of our school. I would highly recommend INECO to any future customer"



WHY DEXTRA LIGHTING WERE CHOSEN

- INECO Energy selected Dextra Lighting because of the performance of their products emitting an excellent efficacy of lumens output for the power consumed.
- Dextra lighting went above and beyond to provide variances in colour temperature of their products to enhance the learning and bedroom environment.
- The Dextra products are manufactured in the UK, supporting the growth of the economy and reducing the inherent carbon footprint of the products.
- Dextra Lighting worked with INECO Energy and the school to ensure product deliveries were outside of key school hours to remove disruption to the school.
- The old lighting waste was collected by Dextra and recycled under an approved Waste Electrical and Electronic Equipment (WEEE) scheme.

The Products

Graduates – aesthetically pleasing for the classroom to provide even light distribution and illuminate the walls

EPK's – high efficiency linear products for the corridor

Hydra's – robust fittings for the Hall to minimise damage from accidental strikes and provide good quality lighting

AMC's – high efficiency bulkhead fitting for cupboards and storerooms



The Result

The Walnuts schools initial focus was to implement a lighting solution which reduced the schools operating costs particularly energy and maintenance costs. However, the school were particularly pleased to be able to benefit from a bespoke lighting solution which enhanced the learning environment utilising government funding with no upfront capital cost.

- Significantly improved learning environment, reducing stress for pupils
- 71% reduction in electrical lighting load delivering 46.6 tonnes annual carbon reduction
- £12,446 first year energy savings

FEATURED PRODUCTS



GRADUATE LED



HYDRA LED



EPK LED



AMENITY PLUS LED