

M&E LED Lighting Upgrade

Quartzelec deliver a comprehensive LED lighting replacement scheme at Alkrington Primary School, upgrading 408 light fittings across the site to improve energy efficiency, enhance learning environments and reduce long-term operating costs.

ROCHDALE COUNCIL | EDUCATION | ALKRINGTON PRIMARY SCHOOL, MIDDLETON

Our Customer's Challenge

Alkrington Primary School required the replacement of an ageing lighting installation that was approaching the end of its operational life. Existing lighting levels in several areas of the school were inadequate, impacting the quality of the learning and working environment for pupils and staff. Rochdale Council sought a modern LED lighting solution that would improve illumination, reduce energy consumption and lower ongoing maintenance and operational costs.

The project presented additional challenges due to the school's 1930s construction, with a wide variety of ceiling types and finishes requiring bespoke installation approaches. The works also needed to be delivered within strict school holiday periods, ensuring all classrooms and facilities were fully operational for the start of each new term.

Alongside programme certainty, the client required minimal disruption to the school environment, including the protection of existing finishes, classroom displays and teaching resources, while maintaining safe access for holiday clubs and other contractors operating on site. These requirements placed a significant emphasis on careful planning, protection of the existing environment and efficient phased delivery, ensuring the lighting upgrade could be completed to a high standard while leaving classrooms ready for immediate use following handover.

The Quartzelec Solution

Quartzelec delivered a complete lighting upgrade at Alkrington Primary School, replacing 408 internal, emergency and external light fittings with modern LED technology across teaching, administration, welfare and external areas of the site. The project commenced with detailed site surveys to assess the building's varied ceiling constructions and finishes, enabling appropriate fixing methods and installation techniques to be developed for each area.

A structured delivery programme was implemented across three school holiday periods, with works carefully sequenced to maximise productivity and maintain progress across multiple areas simultaneously. Installation activities included the removal of existing lighting, modification of associated electrical infrastructure where required, installation of new LED luminaires and upgrades to the emergency lighting system.



The Quartzelec Solution (cont'd)

To support efficient project delivery, materials were managed through a just-in-time logistics strategy, ensuring resources were available as required while minimising on-site storage requirements. Individual classrooms and work areas were completed on a phased basis, allowing sections of the school to be inspected, cleaned and handed over progressively throughout the programme.

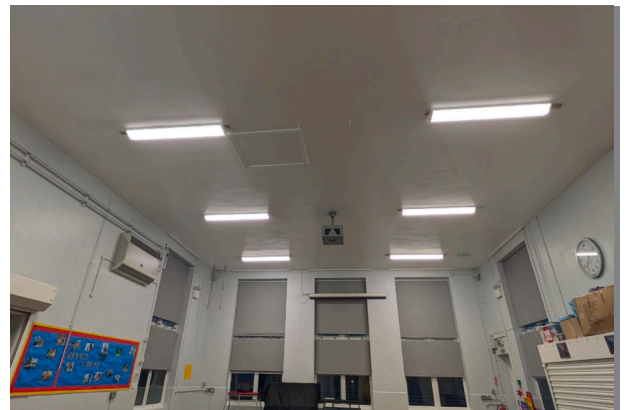
As part of the works, Quartzelec also introduced a value-engineered improvement to the emergency lighting testing arrangement. The original layout utilised individual test key switches for each classroom; this was reconfigured into grouped testing zones, reducing installation requirements while providing a more practical and efficient solution for ongoing inspection, testing and maintenance activities.

The project was completed within the planned programme, with all areas handed over ready for occupation. Delivery was supported by a high level of apprentice involvement, providing valuable hands-on experience within a live education environment while maintaining the quality, safety and performance standards required by the client.



Key Benefits

- Reduced energy consumption and long-term operating costs through the installation of energy-efficient LED lighting.
- Improved lighting levels, creating brighter, safer and more comfortable environments for pupils and staff.
- Simplified emergency lighting testing and maintenance through a value-engineered switching solution.
- Delivered on programme with phased handovers, ensuring all areas were ready for use at the start of each school term.



“Quartzelec delivered the project to a high standard and with minimal disruption. Their proactive approach and attention to detail resulted in a smooth delivery and a significantly improved learning environment for pupils and staff.”

David Hughes, Senior Engineer (Electrical), Rochdale Council

LED
Upgrade

Phased
Delivery

Value
Engineering