PHILIPS

Case study

Lighting

Education

Case Study



Location: South Lanarkshire Philips Lighting: Arano wall light, Maxos LED panel luminaires, CoreView Panel, GentleSpace, LuxSpace, Smartform, SmartBalance suspended system, Pacific LED, Gondola wall mounted fitting



Fast Facts

Customer

South Lanarkshire Council

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Location

South Lanarkshire, Scotland

Philips Products

Arano wall light, Maxos LED panel luminaires, CoreView Panel, GentleSpace, LuxSpace, Smartform, SmartBalance suspended system, Pacific LED, Gondola wall mounted fitting

Project Partners

Lend Lease - Design and Build Contractor; TÜV SÜD Wallace Whittle - Mechanical and Electrical Designer; FES Ltd - Building Services Contractor



LEDs support an efficient learning environment

Philips LED luminaires, including bespoke designs, are being installed in five new primary schools as part of an extensive replenishment programme of South Lanarkshire Council's education estate. The project is being delivered through a framework partnership between the Council and Lend Lease.

South Lanarkshire Council (SLC)

has been engaged in a programme of rebuilding and refurbishing its educational estate for around 10 years and the primary school replenishment is now nearing completion.

Like most Local Authorities the Council had an ageing educational building portfolio and the key driver for its programme was to create schools suitable for educational delivery in the 21st-Century. One of the wider benefits of this programme has been that in new buildings the Council has been able to improve the estate's energy efficiency, life-cycle costs and environmental impact. In many cases this has involved taking advantage of the latest developments in green technologies, such as LED lighting and photovoltaics, which have become more viable over the life of the programme.



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> Barry O'Hagan Project Manager, Lend Lease



The solution

For each of the schools the Council produced project briefs and performance specifications that would create the right educational environment while also delivering the required environmental performance. Detailed designs were then produced by the Council's framework partners and submitted to the Council for approval.

Lend Lease Project Manager Barry O'Hagan recalled: "The Council had indicated that they would like to use LED lighting to take advantage of the energy efficiency and reduced maintenance costs. We invited six lighting companies to tender and decided that Philips was the clear leader in LED technology and offered the best quality products. We were also able to show the client a mock-up of the lighting at Philips' offices in Hamilton.

"In comparing the proposed LED lighting design with a more traditional fluorescent lighting design the team was able to show that installed electrical load would be reduced from 10 W/m² to just 5W/m². This will result in a reduction in CO² emissions from 8.6 kg/ m^2 to 5.6 kg/m^2. In addition, the re-lamping cycle for the lighting will be extended from 10,000 hours to 50,000 hours," he continued.

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Barry O'Hagan Project Manager, Lend Lease

In the case of five of the primary schools - St Marks, St Leonard's, South Park, Kirkton and Bankhead - Lend Lease worked closely with mechanical and electrical designer, TÜV SÜD Wallace Whittle, building services contractor, FES Ltd and Philips Lighting to produce designs that would meet all of the Council's criteria.

The project took full advantage of Philips' comprehensive range, with 10 different LED luminaires being used to ensure that the precise lighting requirements of each space were met. These included a bespoke version of the Arano wall light, developed in conjunction with mechanical and electrical designers TÜV SÜD Wallace Whittle, which combines 8000 lumens uplighting with 2000 lumens downlighting to fulfil design requirements. Maxos LED panel luminaires were specially adapted to enable them to be used as whiteboard lights in classrooms.

Other Philips LED luminaires included CoreView Panels in classrooms, GentleSpace in the sports hall, LuxSpace in corridors, Smartform in toilets, SmartBalance suspended luminaires in the dining room and IP 65 Kitchen Fittings in the kitchen. In addition, Pacific LED fittings were used in cupboards, store rooms and back-ofhouse, while stairways are lit using the Gondola wall mounted fitting. Recognising the performance, energy efficiency and sustainability benefits that LED lighting now affords, SLC now include their use within their client requirements performance specification.

If you would like to see more projects or have an enquiry, please visit us at www.philips.co.uk/lighting or email: lighting.uk@philips.com





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