

Steinel UK Limited

Subject area: energy efficiency, passive infra-red sensors

Title: King's College London drives down energy costs with sensor lights from Steinel

Date: 28 February 2012

Summary

King's College London replaced 1,000 manually switch-operated ceiling lights with high-frequency sensor-controlled lights from Steinel at one of its chief halls of residence – a move that will provide payback within two years and help fund the next carbon reduction project at this pace-setting education establishment.

Project partners

Adlec Installations Ltd of South London was the electrical installation contractor on this project.

The problem

At King's College's Great Dover Street Halls of Residence, the 769 en-suite single bedrooms are served by a network of totally enclosed corridors. With no natural light entering these corridors, artificial lighting was often left on around the clock, 365 days a year. This wasted energy and pushed up the College's electricity bills.

The approach

A trial of 200 sensor-controlled RS PRO 500 lights from Steinel were installed in one of the Great Dover Street blocks. The corridors now have some low level background lighting (from the 3w LED module), with the main low-energy lamps (2 x 13W) activating as soon as someone enters the corridor. Further lamps activate as the person moves along the passage. The lamps remain on for 15 minutes before switching off automatically.

Our goals

- Lower electricity bills.
- Reduced carbon footprint.
- More light for power input from high-frequency operation.
- Instant illumination (with no starting flicker or hum) to ensure health and safety of students walking the corridors.

Obstacles and solutions

Obstacle	Solution
Rewiring the corridors would cost thousands in installation costs.	The RS PRO 500s can act as stand-alone units, eliminating the need for rewiring.
To secure funding for a full installation of Steinel sensor-controlled lighting, King's College needed to apply for government-backed Salix financing, which has strict criteria on 'carbon savings per pound', as well as installation costs.	By using the RS PRO 500s, King's College could demonstrate that it could meet these requirements and achieve payback within two years



Company profile

Steinel is the market leader in the field of lighting sensor technology. With over 50 years experience in the design and manufacture of high-quality sensors, it's not difficult to see why 21 million of our products are installed worldwide. Steinel's product range is so comprehensive we are able to provide a product and a solution for every application – whether it is for use in domestic, commercial or industrial applications.

[Visit Steinel on the Green Directory](#)



Performance and results

“The RS PRO 500 has totally solved our problem,” says Keith McIntyre, Energy & Environment Manager at King’s College. The reduction in energy consumption has been so impressive that the sensor-lights have been rolled out across the whole of the Great Dover Street halls of residence, bringing the total number of Steinel RS PRO 500s in use to 1,000.

Lessons learned

By targeting carbon reduction projects with short payback periods, such as the Steinel sensor-lighting installation, King’s College has been able to reinvest its financial savings, in order to fund new environmental projects on a rolling basis.

Further information

- Steinel: www.steinel.co.uk EAUC Green Directory: www.eauc.org.uk/steinel_uk_limited_silver_member
- Adlec Installations Ltd: www.adlec.co.uk
- Salix Finance: www.salixfinance.co.uk
- King’s College London: www.kcl.ac.uk

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