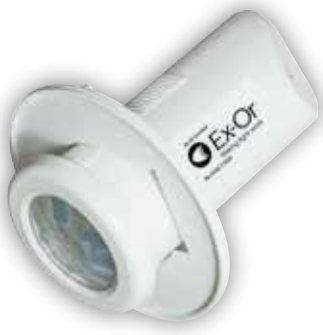
Ex-Or LightSpot Case Study



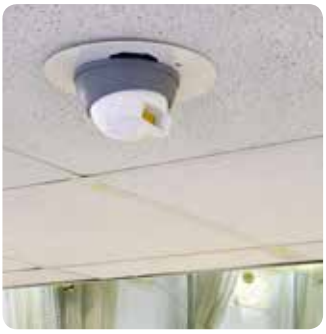
Ex-Or delivers £46,000 annual savings for university

Oxford Brookes University is set to save a predicted £46,000 a year off the energy bills for eleven campus buildings following the installation of lighting control systems by Honeywell company, Ex-Or.

Ex-Or installed its LightSpot equipment throughout nine teaching buildings and administration buildings in a variety of locations, ranging from squash courts to laboratories. Ex-Or LightSpot was also installed in all the communal areas at Warneford and Crescent Hall student apartment blocks, including kitchens, corridors, stairwells and entrance areas. Before the installation, many lights in the buildings remained on constantly, even though lighting was not required.

Total savings of 385,000 kWh per year and 203 tonnes of CO_2 per year, in addition to the dramatic energy cost savings, are anticipated by Oxford Brookes University as a direct result of the Ex-Or installations.

Ex-Or's LightSpot lighting control solution comprises discrete ultrasonic detectors which instantaneously switch the lights on when an occupant is about to enter the monitored area. When lighting is no longer required in the area, the detectors automatically switch off the lights. In addition, the detectors incorporate daylight sensors which automatically prevent the lights switching on when levels of natural light are sufficiently high.



A benefit of Ex-Or LightSpot is its ability to deliver energy savings in almost any environment. In the nine teaching and administration buildings, which are a mixture of historic academic buildings, and others built in the 1980s, 1990s and in recent years, more than 700 LightSpot detectors were installed. These are eliminating unnecessary use of lighting in a large number of open plan and cellular office spaces, laboratories, gym facilities including a sports hall, squash courts, teaching rooms, arts centre and music rooms.

Said Oxford Brookes' carbon reduction manager Gavin Hodgson:

> **The installation of Ex-Or equipment has made a dramatic contribution to the university's carbon reduction programme. Our low carbon transition plan, which is supported by the Carbon Trust, sets out how we can achieve our objective of reducing carbon emissions by 50% by 2020.**
>
> **Eliminating the use of lighting when it is not needed is one of the biggest components in our low carbon transition plan because it delivers such a dramatic reduction in CO_2.**
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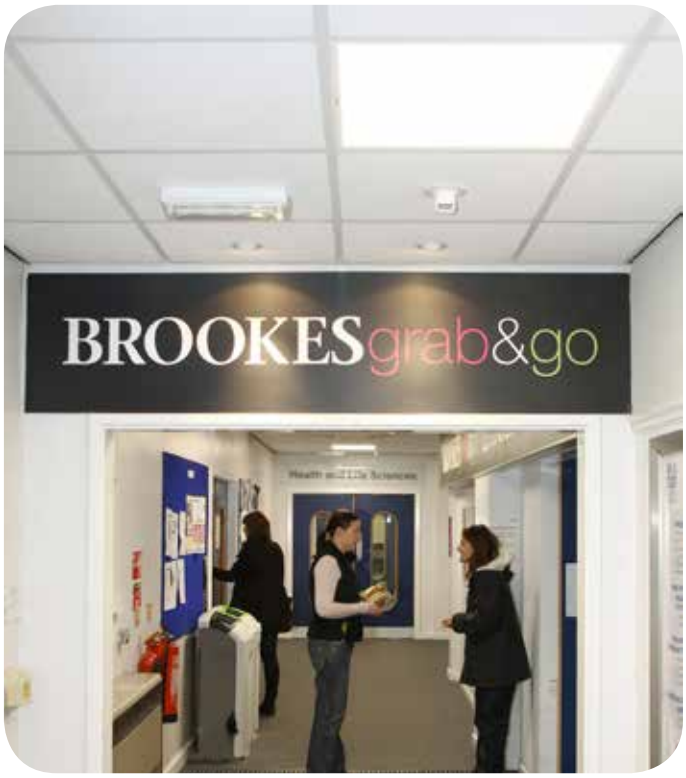
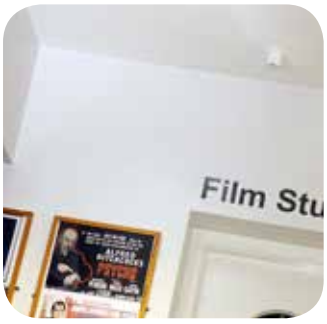
> **One of the benefits of choosing LightSpot from Ex-Or is its ability to deliver energy savings in a wide variety of building types which are used for an extensive range of activities.**



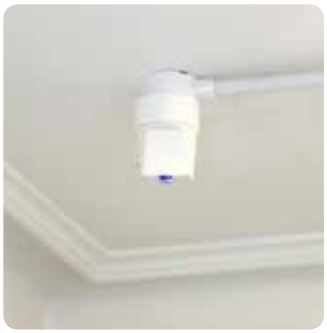
Chrissy Knight, Oxford Brookes' halls manager, said:

> **After the installation took place, I drove past Crescent Hall at night and I thought there had been a power cut – there was hardly a light showing. Normally, the building is lit up, with lights burning needlessly in the common areas. It was a graphic demonstration of the effectiveness of the Ex-Or lighting solution.**



Ex-Or is a preferred supplier of lighting control for Oxford Brookes University and its lighting control and management systems have now been installed in several areas of the campus. The installations at Warneford, Crescent Hall and the nine teaching and admin buildings is part of a phased rollout of Ex-Or installation that will eventually see every single building on the campus delivering energy and carbon savings via automatic control of lighting.

He pointed out an extra benefit that the sophisticated ultrasonic detection technology of LightSpot has delivered. The lighting control equipment ensures that residents in the student apartment buildings opening their front doors into a communal corridor would not be stepping out into darkness.



Said Oxford Brookes' electrical services manager Steve Holtom:

"We had read a number of case studies carried out at other educational establishments demonstrating the environmental and cost saving benefits of Ex-Or lighting control. We took this into account when we first decided which lighting control supplier to choose. The Ex-Or systems installed so far have proved highly effective and totally reliable in use."

"Unlike a standard PIR detector, the ultrasonic technology used in the Ex-Or detectors ensures the lights in the corridor come on instantaneously as soon as a door starts to open, so ensuring the occupant walks out into a lit corridor. We consider this a vital security and safety factor for our student residents."

For more information on Ex-Or lighting control and management solutions,

visit www.ex-or.com

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