

Schneider Electric provides a new approach to both energy and project management with its work for Westfield London.



PROJECT AT A GLANCE

Europe's largest city-centre retail centre

Energy management

THE CHALLENGE

Relatively short time scale for size of project

Sheer scale of project : 600 controllers

Physical area covered by the site – 1.6 million sq ft

THE SOLUTION

Dedicated & experienced team of project engineers

Involvement in the project from the earliest stages

Flexibility as installation evolved
Modular approach

CUSTOMER BENEFITS

Flexibility for each retail unit

Visitor experience enhanced by use of latest technology



Westfield London is set to become one of the country's leading retail destinations. It provides 1.6 million square feet of retail space and offers a dynamic mix of brands and specialist retailers. This includes five major anchor stores alongside exclusive retail outlets for brands like Tiffany, Louis Vuitton and Dior. There will also be an extensive range of cafes and restaurants as well as a 14-screen Cinema De Lux opening next year. Since the inception of the project, energy management and building efficiency has been a priority for developers Westfield. Schneider Electric has been instrumental in helping them realise this vision and Schneider Electric believes that its approach has set a benchmark not only for future developments of this nature but also in the way projects of this scale are planned and implemented.

What was required?

It was August 2007 when Richard Funnell, business development manager at Schneider Electric UK finally received the £3.5 million order for the Andover Continuum system from Westfield, the Australian based developers behind this ground breaking retail destination. Even before then the two organisations had started to establish a strong working relationship that was to stand them both in good stead over the coming months of what was a very tight construction schedule. "Energy management is an essential factor in a project of this scale and one that cannot be ignored. Westfield's willingness to involve us at the earliest stages of the design and planning of the development has enabled us match our technology to their vision;" commented Funnell.

“Schneider Electric is a leading provider of building automation solutions based on Open Integrated Systems for Building IT.”

Westfield had considered other solutions but felt that an Andover Continuum system with BACnet controllers based on a large fibre network was the way forward. The expectations of a building's performance in terms of comfort, efficiency and safety have changed rapidly in the last few years, driven both by increasing energy awareness from all parties, be it developer, owner, tenant or visitor, alongside a greater need for security. The Andover Continuum system has been designed with coping with the future in mind.

Schneider Electric's approach to its development, which allows scalability, flexibility and versatility, combined with a commitment to open standards means that the system can cope when the customer asks the inevitable, "What if I want to do this?" type of question several months after the system has been installed.

Daren Hester, Schneider Electric's project manager, explains more about the Westfield London project. "Schneider Electric took a modular approach to the installation with each of the 265 retail units being treated as an individual project within the overall scheme. This greatly increases the flexibility for each tenant. The installation, believed to be the biggest to date, utilises the Andover Continuum as the main BMS platform. Each of the outstations, over 600 in total, is then connected to the client Information Technology System (ITS) which utilises a TCP/IP backbone (provided under a separate contract)." Schneider Electric's key responsibilities included:

- the provision of controls and monitoring for each of the retail units;
- controls for the five plant rooms
- monitoring of water flow meters, gas meters and condenser water flow meters
- smoke & kitchen extract fans
- fire alarm system monitoring;
- monitoring of weather stations & rain water harvesting levels
- incorporation of controls with remaining building services
- fully integrated BMS plant testing and commissioning
- detailed trend logging of system.

Getting the job done

The less than 18 months construction schedule presented all the contractors on the development with a challenge. Recognising that this would be the case, Schneider Electric committed an experienced and professional team of engineers to the project, who were involved from the outset. This involvement gave them a real insight into the project and enabled them to share the vision that Westfield had for the development. Iain Johnstone, Development Director for Westfield, explained more; "Our goal was to provide an efficient and dynamic environment for retailers and a quality shopping experience for consumers. Schneider Electric has reflected this dynamic and efficient approach throughout the duration of the project and we believe that the system they have installed is bringing real benefits to both tenants of and visitors to Westfield London."



Real Luxury

The entire development has been designed to have real impact; from the glass ceilings, specially designed to maximise on natural light, through to the Italian marble flooring. It was vital for the centre's success that the retailers inside the development also had impact, hence the inclusion of the exclusive Village, which houses such luxury retailers as Louis Vuitton, Dior and Prada. This luxury and exclusivity even extends to the sensors within each of these boutique outlets. Schneider Electric sourced thimble type controllers manufactured in stainless steel, which were designed to blend with the chic and elegant interiors.



Schneider Electric is rapidly establishing itself as a market leader in the provision of building management and energy systems for large scale retail and leisure and projects. It started back in 2003 when the company played a pivotal role in the successful redevelopment of the Bullring in Birmingham. Since then its systems and solutions have been widely used both in the UK and overseas. The company's most recent notable successes are Cabot Circus in Bristol, which also opened in autumn 2008, and St David's 2 in Cardiff, which is due to open in Spring 2009. Richard Funnell, commented; "Developers need to know that they are investing in a system that not only meets the requirements of today but will keep up to date and provide the flexibility to encompass future developments in energy management and efficiency. Schneider Electric's approach draws on the experience of these already successful retail developments and further demonstrates our growing capability and expertise in this demanding market."

Schneider Electric is a leading provider of building automation solutions based on Open Integrated Systems for Building IT. Schneider Electric's mission is to provide added value through building environment services for indoor climate, security and use of energy, delivered with advanced technology to end users and property owners throughout the world. With over 80 years of experience in the HVAC, building automation and security arenas, Schneider Electric employs more than 7,500 people worldwide, with partners and branches in 80 countries. Schneider Electric's

