

TREND CASE STUDY

Trend creates a comfortable and safe environment at Bournville Gardens

First published November 2017

Named The Older People's Development of the Year by Inside Housing magazine, Bournville Gardens retirement village boasts a range of state-of-the-art facilities for high quality living. It aims to use energy as efficiently as possible, maintain perfect climate conditions and keep residents safe, which is why it uses a Building Energy Management System (BEMS) from Trend.

Operated by registered charity, The ExtraCare Charitable Trust, Bournville Gardens is an innovative housing and care development located in Birmingham. Part of the charity's £200m development programme in the city, which will deliver five villages with 1,152 homes by 2017, Bournville Gardens provides much needed retirement accommodation and offers 212 one and two bedroom apartments.

Costing £39m to build, the development is now home to over 300 people. Communal facilities include a shop, library and IT suite, café bar and lounge, hairdressing and beauty salon, fitness suite and gardens.

Ask the experts

The high-end facilities available at Bournville Village are matched by the quality of the building services infrastructure, which comprises a range of cutting edge technology. The ExtraCare Charitable Trust is committed to the effective and efficient use of energy, excellent comfort conditions for residents and life safety, so specified these requirements at the planning stage.

Regal Mechanical and Electrical Services was the on site M&E Designer and installations contractor and invited Trend partner, Smoke Control Services (SCS) Group to



suggest ways that these objectives could be met.

SCS Group was commissioned to create a combined BEMS and natural smoke ventilation system for the site. As a longstanding Trend Systems Integrator, SCS Group knew that the company's industry leading technology, combined with its own integration expertise, would

create a solution that maximised the potential of the building services infrastructure.

SCS Group's Regional Manager (Wales and West), Mike Jackson, explains, 'Our Total Building Automation approach to construction projects simplifies the control of building services by combining two or more typically disparate



systems in order to remove duplicate hardware and software and provide a leaner, more effective solution.

Village people

'Bournville Village features a stunning atrium and because of its curved architecture and the need for phasing of open and closing window actuators, the natural ventilation system required a particularly clever arrangement of controls with a unique cause and effect protocol for the 80 plus actuators across its curved surface.'

comments Mike Jackson

"The BEMS we have installed integrates the atrium windows, smoke and temperature control, natural smoke shafts and lobby windows, as well as the air handling units (AHUs) for air conditioning, the fire detection system, chillers, boilers and site wide energy monitoring."

The system comprises a variety of Trend controllers including IQ®3 and IQ®4 devices, which incorporate a number of features that simplify installation, engineering and commissioning. Martyn Robbins, Trend's Business Development Manager, says, 'The plant room



also utilises the IQ®View8, which has an eight inch full colour 16:9 touch screen display that provides a self-configuring user interface to the BEMS. The IQ®View software presents the user with a familiar Windows operating environment with visual access to all of the controllers and devices on a site, enabling authorised personnel to view and adjust operating times, monitor alarms and make adjustments to controller parameters.'

All for one

Bournville Village is the first ExtraCare Charitable Trust site that has a fully integrated system with a single front-end. This has been achieved by using Trend's innovative IQ®XNC integration platform, which provides a unique and flexible way of interfacing the IQ® system with third-party equipment by presenting information from other systems as though it were from an IQ® controller.

The aforementioned front-end system comprises Trend's market leading 963 Supervisor real-time user interface, which allows designated members of the ExtraCare Charitable Trust team to interact with the BEMS, access building services and make any necessary changes to

the way systems operate. The 963 Supervisor even learns the structure of a system, so that it can make automatic adjustments to how building services are configured in order to save as much energy as possible and enhance comfort conditions.

'Achieving a level of integration between systems that are usually separate means the facilities management team can carry out routine maintenance much more easily,' states Mike Jackson. For example, they wouldn't normally be able to see detail on the smoke extraction system and it can even help identify where preventative maintenance could be necessary.'

Success story

Bournville Village has been universally lauded for offering the dignity and quality of life, comfort and safety that retirees deserve and has attracted a vibrant mix of people.

Nick Sheriff, Area Maintenance and Facilities Manager at Bournville Gardens, concludes

"The ExtraCare Charitable Trust carried research with Aston University and found that residents at Bournville Village lead happier and healthier lives at a lower cost to the public purse. I'm delighted with the way that SCS Group has played its role in the success of this project by configuring a Trend BEMS that integrates into other building services. It's a highly effective approach that didn't just save time and money, but made engineering sense too."

For further information SCS Group can be contacted on **0203 327 0711** or email **c.jones@groupscs.co.uk** Trend Marketing can be contacted on **01403 211888** or **marketing@trendcontrols.com**

Trend Control Systems

Albery House, Springfield Road, Horsham, West Sussex, RH12 2PQ, UK.
Tel: +44 (0)1403 211888 www.trendcontrols.com

MKT1341

TREND