



BOXED ENERGY CASE STUDY INTERNAL SYSTEM



Client: Places for People
Project details: Honey Tree Court
Address: Fairmead, Essex IG10 2RD
Technical Partner: Baxi Heating
System Commissioning/EPC Start Date
 10 March 2016

Steve Mather, Property Services Director at Places for People said:

“The existing heating system at Honey Tree court was over 20 years old, and in need of considerable refurbishment to bring it up to an efficient operating standard.

Along with improvements to performance and reliability, we were keen to reduce any unnecessary consumption - to reduce the environmental impact of the building.

Our surveys identified the need for improvements to boilers, pumps and pressurisation units within the existing boiler house, which is located on the second floor of the building.

We knew that paying for the necessary works through our capital budget would be a significant investment, so we were delighted to learn about Boxed Energy’s innovative funding and servicing solution.

As the Boxed funding model freed up vital capital resources, we were able to invest in updating heating appliances in all rooms, as well as installing time and temperature controls that are easy for our residents to use.”

When Places for People Living+ needed to replace the outdated heating system at a sheltered housing scheme in Fairmead, Essex, Boxed Energy’s commissioning, installation and servicing package presented the ideal solution – with no upfront costs.

Honey Tree Court is a sheltered housing scheme for elderly residents. It was built in 1994 and has 40 one-bedroom flats, as well as a communal lounge, dining room, restaurant, laundry and guest facilities.

The annual gas consumption of the building was measured at approximately 857,000 kWh.

SYSTEMS INSTALLED AT HONEY TREE COURT

Boiler Room

Four 110kW high efficiency condensing boilers (Potterton Commercial Sirius 2 WH110kW) installed on a galvanized ‘skid’ platform

State-of-the-art control system, allowing remote monitoring and operation of the heating system.

New ‘A’ rated Grundfoss Magna pumps

Modern, highly-efficient pressurization unit

Other domestic works

New standard twin panel radiators in communal areas and individual flats

Time and temperature controls for each flat





Through its innovative HSA model, the new heating system at Honey Tree Court will be owned and maintained by Boxed Energy, for the duration of a 20-year contract.

All system maintenance will be managed by Boxed Energy, with Places for People paying:

- a monthly standing charge for the replacement system
- a monthly fixed energy charge
- a monthly operation and maintenance (O&M) charge

Baxi Heating is a leading domestic and commercial heating and hot water brand. Through its extensive product range, Baxi Heating offers high-quality, reliable, energy efficient solutions; including boilers and water heaters, heating controls, combined heat & power products, as well as solar thermal systems.

Boxed Energy sourced third party funding for the necessary upfront capital through its Energy Performance Contract (HSA) model, and commissioned its technical partner Baxi Heating to design and manufacture a replacement heating system.

Boxed Energy's skid-mounted solutions are designed to fit seamlessly into existing heating infrastructure, wherever they are located within a building.

Andy Green, from Baxi Heating's Commercial Team:

“We replaced the existing heating system at Honey Tree court with four high-efficiency Potterton Commercial condensing boilers, which were installed on our galvanised 'skid' platform, pre-fabricated off-site minimising on-site installation time, providing seamless integration to the existing heating pipework in the building.

We also replaced the outdated pressurisation unit with a modern, highly efficient unit and system controls that allowed for remote monitoring and operation of the heating system by the site services team.

Inside each flat we replaced the single panel heat emitters with twin-panel radiators, as well as fitting time and temperature controls that give residents far more control of their heating demands.”

The new heating plant was fully installed by Baxi Heating over an four week period.

Derek Watters, Head of Environmental Sustainability at Places for People:

“Through the Boxed Energy model, we've been able to make major improvements to the communal heating system at Honey Tree Court, without any significant upfront expenditure.

As the Boxed Energy finance model has freed up vital capital for investment, we've also been able to upgrade the controls in each residence as part of the same retrofit project. This means our customers can now monitor and reduce their own energy consumption, whilst the whole building benefits from a far more efficient heating system.

As the HSA model incentivises Boxed Energy to run the new system at maximum efficiency, we know that heating and hot water service will be guaranteed for our residents, and any risk associated with its upkeep is taken out of our hands.

We've achieved improved performance from our building's heating system, and already reduced our carbon emissions on site by over 40 tonnes this year – without the need for any upfront capital outlay.”

