

# Low energy affordable housing development



PROJECT	Kender Estate
CLIENT	Hyde Housing
CONTRACTOR	Osborne
ARCHITECT	HTA Architects
VALUE	£57m
LOCATION	Lewisham
GIFA	4,953m <sup>2</sup>

*"The project has involved close collaboration with Lewisham Council, who have advised HTA that the Kender scheme is being referred to as 'exemplary' by the Lewisham Independent Design Review Panel."*

Source: <http://www.hta.co.uk/news/posts/kender-is-exemplar>

## A considered design to meet sustainable homes requirements

Hyde Group's property portfolio is large and complex, so lifetime property management is an essential element of strategy as well as the initial build considerations. The client was regenerating as part of their longer term asset strategy and required 470 affordable housing units to replace 350 flats. While being affordable, the units had to be built to a high standard to minimise tenant running costs and to an ambitious, versatile design to maximise the value of their portfolio.

The scheme called for design variations to improve the visual impact and create a pleasant living environment featuring balconies and walkways. All of this had to be achieved within a tightly controlled budget and schedule and meet Level 3 of the Code for Sustainable Homes (CSH).

## Thermal efficient design strategy

A design strategy was co-developed that focused on thermal efficiency and speed of build to achieve the dual objectives of quality and cost efficiency. Innovaré custom designed and engineered a solution using the i-SIP System of structural insulated panels to meet Breyer Groups requirements. Meeting the strict Level 5 sustainability requirements required the finished

building to have exceptionally low levels of energy use and CO<sub>2</sub> emissions. Often, this means installing expensive renewable energy add-ons such as ground source heat pumps. But the 'fabric first' approach taken by Innovaré significantly reduced the reliance on these. This in turn limited the initial cost, simplified the fit-out and reduced the ongoing maintenance needs. The high level of thermal insulation of the i-SIP System was boosted by a factory-fitted reflective breathable membrane, giving further air-tightness and enhanced insulation.

## Rapid delivery within budget

The 470 units were delivered on schedule and within budget. The scheme met the Level Three Code of Sustainable Homes requirements and created a pleasant environment for the residents. The versatility of the i-SIP System proves that cost-effective and rapid construction needn't be at the expense of good design, or on-going management and maintenance costs. Differentiation in the architecture was achieved cost-effectively using a variety of renders and external cladding.

The scheme was awarded an Eco rating of 'Very Good' - an excellent achievement within the budget constraints of the project.

