

Product and project engineering solutions deliver rapid build of energy efficient, affordable rent homes

OSBORNE



PROJECT	Bryce Lodge
CUSTOMER	Saxon Weald Housing Association
LOCATION	Horsham
CONTRACT	Two stage design and build
COMPLETION	2011
VALUE	£4.7m

Issue

Saxon Weald Housing Association had a specific project brief for the delivery of 38 affordable rent homes. The key project issue surrounded the customer's requirements for the accommodation to be energy efficient and sustainable with a rapid, low cost build programme.

- 14 homes needed to be built to Passivhaus standards and in accordance with Level 4 Code for Sustainable Homes (CfSH)
- The remaining homes had to meet Level 5 CfSH

Solution

There were two key elements to address the high quality, low cost challenges with this project.

Product engineering delivered sustainable accommodation of the highest quality:

- All 38 homes were built using a panelised system to engineer every detail to optimise building performance. This method provided extremely high levels of sustainability and thermal efficiency.
 - To address air leakage rates required for the Passivhaus standard, Osborne appointed a tape manufacturer to the team so that the project could effectively focus on attention to detail.
- Project engineering solutions ensured the best value for the customer:
- The use of offsite construction methods effectively addressed the issue of speed of construction, proving to be much quicker than traditional methods.

- A phased build approach was utilised with the first block of flats being completed around the panelised design. This provided valuable design logistics information which led to continuous improvement as the project progressed.

Outcome

Through utilising previous experience of constructing environmentally sustainable projects, along with efficient engineering solutions, Osborne could secure savings and ensure value for the customer. The delivery of Passivhaus accommodation resulted in limited cold bridges and reduced energy costs through a high standard for thermal performance and air tightness.

