Housing – Fabric first for low carbon living

- 300,000 homes per year
- Net Zero-Carbon by 2050
- Climate Resilience
- Fabric First
- Social tenants move out of fuel poverty

Need

Tackling the housing shortage at the same time as progressing the journey to net-zero carbon homes poses a challenge for us all. Building standards and regulations keep changing as successive governments adjust their climate change initiatives to deliver the 2050 global commitment.

The reality though, is that we have access right now to innovative off-site solutions and modern methods of construction for affordable, well-insulated, energy efficient homes. Homes which can move people out of fuel poverty and closer to the goal of zero-energy living. We just need to think and act a bit differently.

Solution

Early Engagement

Many of the decisions that impact on energy performance, cost and time are made very early in the project and become fixed into the planning conditions which limits product selection later in design. If the industry moves towards more collaborative engagement from the outset, then we can work together to maximise opportunities for low energy and systemised housing solutions. **Our Development business has taken this approach and a Design Lead now works from the start with our architects on new schemes.**

Put Fabric First

Many new low carbon developments choose to prioritise green energy alternatives over improving the efficiency of the building itself. This can be a missed opportunity to select a building fabric which creates an airtight, well insulated home thus automatically reducing the reliance on supplementary heating and ventilation.

We always adopt a Fabric First approach using the Fabric Energy Efficiency Standards (FEES), incorporated into the Code for Sustainable Homes (CfSH), and we use a variety of Modern Methods of Construction which can improve the building fabric on low and high rise developments.

For Redbrick Estates, as part of a scheme to deliver 55 homes, we switched the fabric on an element of the build to Innovare's i-SIP solution saving 36 weeks on site and reducing carbon.

In Brighton, we are using Innovaré's new multi-storey SIPs system and ground source heating for a mixed tenure development of 64 new homes.

At Wardells Grove in Lewisham we created 124 affordable units using SIPs and achieving CfSH Level 4.

Our approach is enhanced by the relationship with our sister company Innovaré Systems who entered the low carbon market in 2005 with their structural insulated panel system. A system which was fully tested in a demonstration house at the British Research Establishment.

Outcome

By engaging with us at concept design, we can help you create affordable, low carbon homes. Homes which focus on the fabric first to maximise air tightness and provide high performance insulation followed up with high quality installation to limit the risk from thermal bridging. In this way the reliance on heating is reduced to provide affordable low carbon homes which are energy efficient to run and reduce fuel poverty.