

# Case Study: Avante – Learning from the SixtyK house

The Government's Design for Manufacture competition challenged the house building industry to build high quality well designed and sustainable homes for a construction cost of £60,000.

In competition, Crest Nicholson, with consortium partners Kingspan and Sheppard Robson was awarded two sites – one at Spectrum on the site of Renny Lodge in Newport Pagnell, and Avante – the former Linton Hospital site in Coxheath, Kent.

At Avante, all of the homes are being built to EcoHomes Excellent standard and apply Modern Methods of Construction (MMC). The key components of the winning bid were to provide 30% of the homes to the £60K standard and 25% of the homes as affordable housing.

"At a group level we have been specifying sustainable timber since 2006, and a review in 2007 showed that 78% of our group suppliers have FSC certification and can demonstrate chain of custody."

## How we turned design into reality

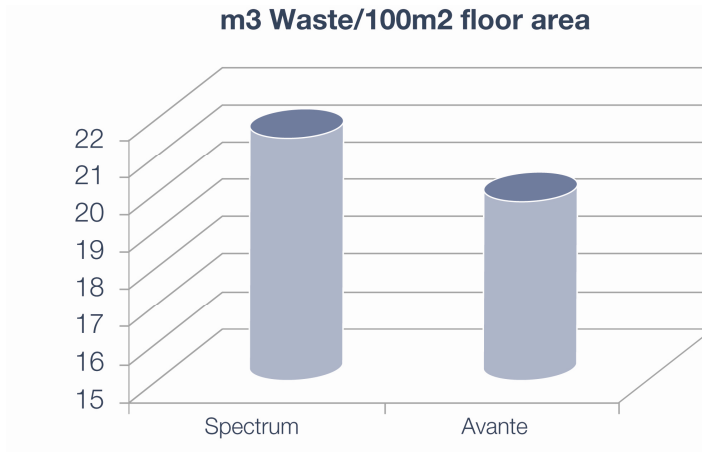
1. Set up a knowledge-sharing programme to learn from the Spectrum site and hold a series of meetings between the design and construction teams from the two sites.
2. Provide training to the subcontractors on the structurally insulated panel system used on the houses.
3. The main building elements materials are "A" rated under the BRE Green Guide for Housing Specification, and low water consumption appliances and fittings are specified throughout. An audit of the supply chain was conducted to ensure all the materials were responsibly sourced, and supply chain partners were required to have an Environmental Management System.
4. Minimise waste generation. The timber frame material comes pre-cut to size, and any excess is taken by the manufacturer and reused in the factory. Many of the materials are delivered on bearers to minimise packaging waste and encourage re-use of pallets on site. Unused materials are carefully protected to minimise damage. All plasterboard off-cuts are recycled by our supplier, and the external hoarding is re-used and re-positioned as the site evolves.

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## What were the results?

A programme to measure material waste and labour productivity showed significant improvements at Avante over Spectrum in hours spent building and in waste generated.





### **What our customers think about Avante SixtyK homes**

The First Time Buyer Initiative helped purchaser Tom Farrant to secure his first home without having to club together.

"I love it here and I am delighted that I was able to buy. There is a real sense of community and I get on particularly well with my neighbours – so much so that we regularly invite each other round to each other's homes. The development has a great atmosphere and that is exactly what I was looking for. The reduced energy costs of my home are an added bonus – anything that makes life a little bit more affordable is great by me."

**Tom Farrant, Resident at Avante**