



Right advice keeps Code Level 3 costs down

With the Code for Sustainable Homes Level 3 now being made a Planning Condition for most new homes in Greater London, developers are finding that awkward sites can incur unexpected costs – unless they get the right advice.

Budgetary decisions

This is why construction company Stamford West brought in AJ Energy Consultants when they began building a pair of maisonettes, on the site of some former garages in Barnet, Greater London. Situated at the end of a cul de sac, one of the main challenges was that the gas main only ran past the top of the road – and extending it would have added a cost of around £13,000 to the modest build. Since a single-phase electricity supply already served the garages, it was decided to upgrade the fuses and opt for electric heating.

“Using standard construction processes, specifying electric panel heaters would mean that it’s nigh-on impossible to meet Code Level 3,” explains John Simpson, Director of AJ Energy Consultants. “However, because a prefabricated timber panel construction system was chosen, we were able to work with the contractor and the frame company, to establish the insulation properties necessary to use electric heating under Part L.”

“We came to AJ because they had been recommended by another building firm we know who does similar spec building projects to us. We can’t rate the service we received highly enough. They were very easy to work with, and fast in coming back with advice – they even made themselves available out of hours.”

Robert Brunton, Director at Stamford West

With nearly all the rooms featuring external walls, the U-values had to be impressive. “John knew immediately the upgrades we would need to make, without even doing the calculations,” recalls Robert Brunton, Director of Stamford West. “We increased insulation in the roof, and used a jet floor polystyrene block and beam system with a reinforced concrete slab on top. John also advised triple glazing to be absolutely sure of hitting the targets. At £700 more than double glazing for the two units, it wasn’t a big investment.”

“The external walls achieved 0.14 W/m².K, the floors at 0.15 W/m².K, roof at 0.11 W/m².K, and windows at 1.20K/m².K,” says John. “This made the dwellings more airtight, so we used a target of 5m³/hr/m² in the SAP calculations. A well insulated hot water cylinder was chosen for each dwelling.”

Waste cost cutting

Stamford West’s team were also able to improve their waste management plans too, thanks to John’s advice. Whereas normally they would remove any spoil from the site first, on this project they used a concrete crusher to recycle panels from the original garages into backfill material. They were also able to come to an agreement with the Local Authority, to take their waste timber, cardboard, metal and polystyrene to the local amenity site. They ended up using only two skips on the site over the entire project, which was not only positive in environmental terms, but budgetary ones too.

Project summary:

- Project located in Barnet, Greater London
- Two maisonettes for a private client
- Planning Condition of CfSH Level 3

- AJ Energy introduced by another similar building firm
- Proactive problem solving undertaken
- Electric heating chosen, yet still met Code requirements
- Speedy responses ensured build proceeded quickly
- Waste advice led to cost and environmental benefits