

Response to EST case study

Hockerton Housing Project puts the EST's New Practice Profile into context and to highlight a few errors.

"...there is in practice, little functional need for the earth covering" (P.2, 4th paragraph)

It is true that the massive amount of insulation surrounding the homes ensures that very little heat would be able to escape to soil covering. However the earth has the additional affect of reducing exposure of building fabric to elements, both reducing heat loss through air movement affects and wear on the building materials. This will reduce maintenance costs in the future. The earth covering also has an additional and critical benefit, in that it reduces its visible impact, making it almost invisible from surrounding roads. An important aspect of the project is it's low impact, both in terms of its ecological imprint as well as aesthetics to others.

"The occupants have formed a trading co-operative, Hockerton Housing Project, to generate employment on site. This has involved a wide range of ventures, such as the development of eco-balls (an alternative to detergent) and human powered vehicles." (p.3 shaded box)

The correct name for this company is 'Hockerton Housing Project Trading Ltd'. This is a not-for-profit company limited by guarantee. It's key activities are running site tours, delivering talks, media articles, consultancy services and managing over 30 enquiries a week. It no longer sells eco-balls, which were simply a bought in sales item, having replaced them with a similar but more cost-effective alternative.

"The construction of the housing took two years longer than planned due to delays in availability of specialist contractors." (p.3, section- 'House Construction')

The whole construction only took 18months to two years (from first to last house completed). The project did take longer than hoped by 3-6 months, but was primarily due to delays in financing and shortage of local labour (an important criterion of the project).

"The daily energy consumption fluctuated between 6kWh and 33kWh." (p.5, para 2) –

More typically energy consumption varies between 6kWh and 12kWh. The higher figures seen in accompanying graph, peaking at 33kWh were mainly due to heating of hot water cylinder via immersion prior to commissioning of heat pumps. During this period there were a few problems setting up the innovative hot water system which resulted in the tank being emptied and refilled several times, requiring heating from cold each time - hence the comparative excessive energy use.

"During the winter months, the temperature fluctuated around 17C. During the summer, typical temperatures rose to around 24C" (p.6, para 2)

This house had a low occupancy during the winter months of monitoring. Other homes at the same time were significantly warmer, and in one case did not go below 18 C all winter. More typically for our second year the

temperatures in most houses during winter were 18-20 C. Perhaps more importantly, in all but one house no supplementary heating was used - because it was not needed. Indeed many project members have complained that stays in more conventional homes were too cold! In our experience for most of our homes more typical summer temperatures were 22-23 C.

"The temperature in the conservatory (which is unshaded) regularly rose to over 30C." (p.6 par 3)

Where there is shading, temperatures rarely rise above 25oC. It was always planned that the conservatories would have shading as an integral part of the design. However this is a considerable extra cost and so blinds have not been fitted to all homes.

"Some occupants reported that the houses were too warm at night..." (p.6, para7)

Because all rooms in homes have a similar temperature, bedrooms are relatively warmer than in conventional homes. This has taken some residents a while to grow accustomed to. However nobody currently finds this an issue, particularly as we have got more used to controlling temperature of homes. It is quite possible on summer nights to reduce bedroom temperature if required. Indeed many project members find bedroom temperatures far more comfortable than conventional homes, which too the contrary is either draughty or more frequently stuffy than in these homes.

"... One house experienced severe condensation and mould growth" (p.7, para 2)

As stated this was primarily due to ineffective use of ventilation system. However it was also due to the greater humidity levels in that first winter due to continued drying out of building. In our second winter no one has experienced mould growth or condensation problems. To the contrary, many conventional homes feel relatively damp with severe condensation problems during winter.