

3 years of Future Energies progress

Future Energies and our sister company, Alan Montague Limited, have just finished a major low carbon home project in Denstone, Staffordshire. Environmentally sound materials were utilised in the construction and several energy efficiency features and innovative technologies are incorporated into this new build, in order to reduce CO2 emissions.

Four superior four bedroom executive detached residences, offering spacious family sized accommodation, have the benefit of Heat Pump technology, double glazing and high thermal insulation qualities, with water reclamation and heat recovery ventilation.



This spacious accommodation extends to entrance hall, ground floor cloakroom, lounge, dining room, separate study or family room, large fitted breakfast kitchen and utility room. Outside is a wonderful easy keep garden laid to lawn, with solar powered street lighting provided.

The project is situated in the prestigious Denstone village, which has easy access to comprehensive facilities, the A50 Derby/Stoke link road linking to the motorway network of the M6. JCB headquarters are approximately two miles away. The exciting Alton Towers is only a stone's throw away for the younger generation.



Heat recovery and insulation

The project homes were built with the very highest quality materials, using extra thick insulation and great attention to detail to ensure internal home air quality. All the homes are equipped with an air heat recovery and air purification system as standard.

Recycling Systems

Recycled water can be used for flushing toilets and there is an extra tap installed in the garage so you can wash your car without costing the earth! The rain water harvesting system is built to the highest specification and is buried in the garden as standard issue with all these homes. The huge water container automatically stores the rain water running off the roofs, and then pumps it through filters into the homes to reduce the water bills.



Air Tightness Testing

The homes have also been air-tight tested for leaks. Air testing buildings is a method used to establish the rate of a property's air leakage. Testing is now mandatory under the 2006 Building Regulations part L. All the homes are fully tested for air tightness with the very latest in computer testing technology. These homes therefore have lower heating bills.



SAP



Standard Assessment Procedure (SAP) is the Government's approved method of assessing a building's energy performance. An Energy Performance Certificate (EPC) gives tenants and buyers information on the efficiency of their property. All homes have been certified under the SAP and have **SAP rating of 104** (2002 regs) (increasing with Heat Recovery System) Energy Saving Rating **58** : Impact CO2 rating **74** (standard UK homes are normally around the 50 CO2 rating.)

The homes are also equipped with the very latest in thermostatically controlled high performance radiators, an electrical circuit for micro wind turbine electric generating installation, energy efficient lighting in the home, with high light output low energy spot lights in the kitchen area. Traditional brick and tile was used with increased thermal insulation and air tightness to cavities, in accordance with Good and Best Practice



Standards. This increases thermal comfort for summer and winter times. Double glazed (Low E glass) windows with high insulation properties were also used as standard. Low-emission glass (Low-E) is a clear glass, which has a microscopically thin coating of metal oxide. This allows the sun's heat and light to pass through the glass into the building. At the same time it stops heat from leaving the room, reducing heat loss considerably. All window frames are made from sustainable wood reserves avoiding plastics. Concern about the rate at which the world's forests are being depleted is widespread. Forests are rapidly being lost in Africa, Central America, South America and in Southeast Asia, accounting for almost 90 percent of the world's deforestation of 13 million + hectares per year. Composters are supplied as standard to all homes. (R.R.R) Recycle, Reuse and Reclaim, the 3 Rs in Denstone: composting is nature's way of recycling and helps to reduce the amount of waste we put out for the bin men. By composting kitchen and garden waste you can save energy and easily improve the quality of your garden soil.

The Future Energies' Heat pump



Demands for economical and highly efficient heating products have increased as standards for energy efficient homes have become paramount. The need has never been greater for environmentally friendly and efficient heating systems. Future Energies brings you the most economical green way to heat your home. Why not make an appointment and come and see how we are heating our homes! Air source heat pumps utilize energy stored in the air around us, and convert this to useful energy for domestic space heating and hot water. The electrical power enables the heat pump unit to extract the energy from the ambient air at a ratio of up to 1:5 thus providing water at a temperature suitable for domestic space heating, with either radiators or under floor heating.