

THE WHITE HOUSE BARN, NEWNHAM

ENERGY AND SUSTAINABILITY STATEMENT

As is now universally accepted there is a need for us all to take a responsible attitude towards the environment not just for ourselves but also for future generations.

Mr and Mrs Wainright-Lee share this view and ethos.

Additionally, aware of soaring energy prices, there is a need to ensure that their new home will be as energy efficient as practicable.

Whilst the aim will be to achieve as close to passive as possible, all reasonable means will be taken to exceed the prevailing Building Regulations and this will be covered in detail at the Building Regulation/working drawing stage.

Below is a schedule of relevant proposals:

- The overall construction will be insulated to a U-value level of lower than 0.18 for the external wall and lower than 0.15 for the roof.
- Windows will be Rationel or similar and fitted with Fineo 6.7 glazing system giving a U-value of c. 0.7.
- Air lightness target is of 0.6 air changes per hour at 50 Pascals pressure to reduce energy loss.
- Heating and ventilation will be provided by an air source heat pump ventilation system (HPV) which will provide heating and cooling and includes an HPV air to water heat pump with a 300 litre hot water storage.
- HPV 1 unit provides a ventilation requirement of 191m³/hr together with 3.2kW of heating and 2.2kW of cooling.
- The system will employ Mechanical Ventilation with Heat Recovery (MVHR) to enhance air quality and comfort for both heating and cooling.
- A detailed room-by-room heat loss appraisal will be carried out to optimise the design.
- The target is to achieve heat recovery of 80% or better.
- Low energy lighting throughout.
- Rainwater will be harvested in 210 litre water butts which will be used for garden irrigation
- Low water use WC cisterns, wash basins, baths/showers will be installed.

- An electric vehicle charging point will be provided, however dedicated cycle storage is not required.
- Although Biodiversity Net Gain (BNG) does not apply to this Self-Build proposal, a responsible attitude will be taken to landscaping and the provision of planting that will encourage diverse wildlife habitats. This is already achieved by the large planter beds which will be tended and maintained and enhanced where appropriate.
- The mature shelter belt of trees that lines the Southern and Western banks of the Cat Ditch will receive due husbandry to ensure retained good health and vigour and again ideal wildlife habitats.
- The frontage to Ashwell road consists of a mature hedge and trees which will continue to be tended and maintained as appropriate with judicious husbandry and pruning including sufficiently cut back to achieve the prescribed sight lines/visibility splays for egress onto Ashwell Road.
- The contractor will be one regularly used by the family and is local and, as far as possible, so will be the subcontractors. Materials and product supplies will also be sourced locally, where possible, from known and trusted companies.