

SPM/KS/2203
30 March 2022

**HILLFORD HOUSE
BARFORD HILL, BARFORD, WARWICK, CV35 8DA**

PROPOSED INTERNAL ALTERATIONS & SINGLE STOREY EXTENSION

ENERGY STATEMENT

1) FLOOR CONSTRUCTION

Floor to be 75mm sand/cement screed on separating membrane on 150mm concrete with 1200 gauge polythene DPM on top of 90mm thick Celotex FF 4000 PR insulation board (or similar) on 25mm blinded sand on 150mm hardcore of approved crushed stone.

Note: All joints of DPM to be lapped and taped with DPC.

2) WALL CONSTRUCTION

External walls are to be of cavity construction approximately 350mm overall thickness consisting of external rendered blockwork of 140mm in stretcher bond (to match existing), a 105mm cavity with a 'partial fill' insulation of Celotex CG 5000 insulation (50mm thick) with an internal leaf of 100mm blockwork. Masonry below DPC to be Class B 'semi engineering' bricks. Hyload permeable DPC at 150mm above ground level and Hyload insulated DPM to side and bottom of all door and window openings. Internal wall finish is to be painted gypsum plaster. External wall construction to meet and exceed Building Regulation U-value.

3) ROOF CONSTRUCTION

Flat Roof

Evalon single ply membrane on Kingspan thermataper TT47 insulation on torch on felt vapour control layer on 22mm plywood deck on softwood rafters.

Note: Roof construction to meet and exceed Building Regulation u-value.

4) GENERALLY

High efficiency light fittings will be provided (i.e. light fittings only capable of accepting lamps having a luminous efficacy greater than 40 lumens per circuit-watt) to at least one third of all rooms, these fittings should be positioned in rooms or circular areas most frequently used.

All doors and openable lights to have draft strips around openings with insulated cavity closers to achieve 1.8W/m²k.

5) RAINWATER HARVESTING

The surface water collected from the roof will be collected in a water butt for re-use for watering of plants.

Due to the modest size of the extension, we feel it is not necessary to provide underground rainwater harvesting systems, as the water butt will provide adequate use for re-use of the collected waters.
