

Dear Sir/Madame

21 July 2014

Domestic Heating Proposal for Mr Barry Oliver

The building is of solid wall stone/brick construction , dry lined with 50mm Kingspan insulation and plasterboard. The loft is insulated with 300mm of mineral wool. The floor has been insulated with 100mm of polystyrene PS30. The windows remain single- glazed and are the largest single source of heat loss. The total estimated heat loss from the building envelope, including provision for air changes, is 13,680 kW at 20°C internal temperature and -2°C external temperature difference.

The property will be equipped with a 15kW wood burning stove located in the main living area and open to convection heating of the atrium area above. This will be the principal source of heating for the property.

Domestic hot water will be supplied on demand by an 'A' rated Worcester Bosch combi-boiler sized to provide hot water for 2 showers simultaneously. The boiler will also provide background and bedroom heating through 6 radiators with a combined output of 8040 kW; ie 59% of the heat demand. The radiators will be fitted with thermostatic regulating valves (TRV's) to limit the consumption of LPG.

With this arrangement it is estimated that the wood burning stove will provide a minimum of 41% of peak heat demand.

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