

Cottage - 2018 - Block built - 115m<sup>2</sup> (1240ft<sup>2</sup>)



Menlo, County Galway

Existing Building Details			
Building Elements		Insulation Thickness (mm)	U-Value (W/m <sup>2</sup> .K)
Walls	Cavity walls 350mm	50mm-100mm	0.1
Roof	Pitched Roof insulated	300mm	0.1
Floor	Floor passive raft	Unknown	0.1
Windows	Triple glazed	N/A	0.6
Doors	Door + porch	N/A	1.5

Existing Heating and Lighting Characteristics

Heating System		Energy	Efficiency (%)
Primary Heating System	Exhaust Air Source Heat pump (300W)	Electricity	340%
Secondary Heating System	Wood burning stove (Low NOx DEFRA approved)	Multi fuel	75%
Renewable	Photovoltaic panels - 1kWp		
Lights	LED		

Results

Thermal bridging factor	0.036 W/m <sup>2</sup> .K
Air pressure Test (3)	DEAP value - 0.0246 ac/hr
BER	A2 - 35kWh/m <sup>2</sup> /year
Build cost	€ 160,000 (incl. builder, engineer, architect)

Audit report edited on 10/12/2019