

Detached House built 2002

Total Building Area (m2): 242

	BER Rating	Energy Value	Potential Energy Savings	Total Annual Space Heating Demand	Heating costs per year [1]
		(kWh/m2/yr)	€	kWh/yr	€/yr
Dwelling Current Condition	B	123.84	-	29,969	€3,716.19
Dwelling Post Works	A	42.14	€2,288.49	10,198	€1,427.70
CO2 Savings per year		6.92 Tonnes			
Equivalent Planted Trees		494 Trees			

Item	Recommendation	kWh/m ² /yr	BER
Roof Insulation	Install 100mm of attic insulation	119	B
New windows with a uvalue of 1.2 New Door with a uvalue of 1.4	New windows with a u-value of 1.2 and a Solar Transmittance of 0.6 including roof windows New door with a U-value of 1.4	115	B
Blocking of Chimneys & Vents	Install closable vents in all bedrooms if not already installed and block all others. Remove open fires and stoves and block chimneys. Draught strip all attic hatches.	114	B
Walls	Install 62.5mm of Unilin drylining with a Thermal Conductivity of 0.022 on all external walls including walls into unheated spaces. Or 100mm of External Wall Insulation with a thermal Conductivity of 0.038	108	B
Heating system and Controls	Install full time and temperature controls with 3 zonestwo heating and one HW. Install and air to water HP with a Seasonal Space Heating Efficiency, η_s / SCOP/A of 127 minimum and Water Heating Efficiency, η_{wh} 125 minimum. HW cylinder taken as 200L with a Declared loss of 1.5 KWH/day. As part of this upgrade, we have allowed for the blocking up of any and all open fires.	42	A
Typical Cost of Works €	€36,000		
Estimated Payback (Years)	15.7		

[1] Assumes (and this is critical) that the electrical load for the Heat Pump is shifted as much as possible to cheaper rates on a Smart meter plan

[2] These costs are net of SEAI and are based on a SEAI survey of actual retrofit works carried out by certified contractors in 2025

The house pictured is not the actual home surveyed, but it has the same characteristics