

Detached House built 1929

Total Building Area (m2): 74

	BER Rating	Energy Value	Potential Energy Savings	Total Annual Space Heating	Heating costs per year [1]
		(kWh/m2/yr)	€	kWh/yr	€/yr
Dwelling Current Condition	G	362	-	26,788	€3,321.71
Dwelling Post Works	A	71	€2,586.15	5,254	€735.56
CO2 Savings per year		6.40 Tonnes			
Equivalent Planted Trees		457 Trees			
Item	Recommendation			kWh/m ² /yr	BER
Floor	Replace original floor with new construction containing 150mm of Unilin XT/PR-UF under 75mm of screed			513	G
Roof Insulation	Install 300mm of attic insulation			391	F
Windows and Doors	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			382	E1
Wall Insulation	100mm of External Wall Insulation with a Thermal Conductivity of 0.038			208	
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.			71	B1
Typical Cost of Works €	€29,100				
Estimated Payback (Years)	11.3	to	20.0		

[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