

Index ID7012
City, Country Ballinode, Monaghan, Ireland
Climate Zone Cool Temperate
Year of Completion 2023
Certified as Classic Passive House
Building Type Single Family Dwelling
Treated floor are(m²) 188 m² According to PHPP

Construction Retrofit of existing 1970s bungalow. Floor replaced with 180mm PIR Insulation. Cavity Wall Construction with 200mm External Wall Insulation. Timber roof with 220mm blown cellulose with 35mm Wood fibre and 50mm sheep's wool insulation.

U-values [W/(m²K)]	Exterior wall	0,10
	Roof	0,12
	Ground floor	0,11
	Windows	0,96
	Glazing	0,71
	g-value of glazing [%]	60%

Airtightness Concept Airtightness was achieved with airtightness paints at specific junctions with plaster layer. Connection to windows via plaster able tapes, roof was membrane and tapes

n₅₀-value [1/h] 0,53

Ventilation system Renson Delta 450 Certified MVHR system

Heating/ domestic hot water Eco Forest ASHP with underfloor heating. Linked to solar PV system for optimisation. DHW is from the ASHP.

Renewable Energies 5.7 kWp PV array on the south-facing roof.

Other Ecological Aspects Use of ecological and regionally produced building products in the form of Cellulose, Wood Fibre and Sheep's wool insulation

According to PHPP	PHPP-version	9
	Heating demand	25[kWh/(m ² a)]
	Heat load	10[W/m ²]
	Overheating	1[%]
	PER demand	44[kWh/(m ² a _{TFA})]
	PER production	26[kWh/(m ² a
	PE demand	79[kWh/(m ² a)]



BungaLow Bliss

Passive House Retrofit

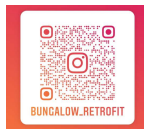
Monaghan, Ireland



PASSIVE | FUTURE | QUALITY | ENERGY



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Presented by Dr. Barry Mc Carron

KORE Retrofit

Republic of Ireland

