

# Certificate

Certified retrofit  
'EnerPHit Unit'  
(Climate zone: Warm)



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Avenida 25 de Abril, nº33, 3º esquerdo frente, 3830-044  
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Client	Homegrid, Lda Avenida 25 de Abril, nº33, 3º esquerdo frente 3830-044 Ílhavo, Portugal
Architect	Homegrid, Lda
Building Services	Climacom
Energy Consultant	João Gavião

Buildings retrofitted to the EnerPHit Standard offer excellent thermal comfort and very good air quality all year round. Due to their high energy efficiency, energy costs as well as greenhouse gas emissions are extremely low.

The design of the above-mentioned project meets the criteria defined by the Passive House Institute for modernization to the 'EnerPHit Unit' standard:

Building quality		This building		Criteria	Alternative criteria
Heating	Heating demand [kWh/(m²a)]	17	≤	-	-
Cooling	Frequency of overheating (> 25 °C) [%]	8	≤	20	-
Airtightness	Pressurization test result (n <sub>50</sub> ) [1/h]	0,7	≤	0,0	-
Renewable primary energy (PER)	PER-demand [kWh/(m²a)]	56	≤	64	64
	Generation (reference to ground area) [kWh/(m²a)]	26	≥	-	-
Component quality					
	Wall with interior insulation to ambient air (U-value) [W/(m²K)]	0,40	≤	0,75	-
	Windows/Exterior doors (U <sub>w,installed</sub> ) [W/(m²K)]	1,26	≤	1,28	-
	Glazing (g-value) [-]	0,41	≥	-	-
	Glazing/shading (max. solar load) [kWh/(m²a)]	68	≤	-	-
	Ventilation (effect. heat recovery efficiency) [%]	82	≥	-	-

The associated certification booklet contains more characteristic values for this building.

Innsbruck  
15.05.2024

Certifier: Laszlo Lepp, Passivhaus Institut