



EuroPHit



D2.2_ Certificate for step-by-step energy efficient refurbishment including RES

INTELLIGENT ENERGY – EUROPE II

Energy efficiency and renewable energy in buildings

IEE/12/070

EuroPHit

[Improving the energy performance of step-by-step refurbishment and integration of renewable energies]

Contract N°: SI2.645928



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Technical References

Project Acronym	EuroPHit
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Project Coordinator	Jan Steiger Passive House Institute, Dr. Wolfgang Feist Rheinstrasse 44/46 D 64283 Darmstadt jan.steiger@passiv.de
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Lead beneficiary	01_PHI
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Author(s)	Zeno Bastian
Co-author(s)	
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Certificate

Certified retrofit
'EnerPHit Premium'
(Climate zone: Cool-temperate)



End-of-terrace Passive House Example Street 99, 99999 Example City, Germany



Client	Passivhaus Association of Owners Example Street 99 99999 Example City, Germany
Architect	Example Architectural Firm Example Street 99 99999 Example City, Germany
Building Services	Example Mechanical Services Firm Example Street 99 99999 Example City, Germany
Energy Consultant	Example Energy Consultant Example Street 99 99999 Example City, Germany

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 building meets the criteria defined by the Passive House Institute for modernization to the 'EnerPHit Premium' standard:

Building quality		This building	Criteria	Alternative criteria
Heating	Heating demand [kWh/(m ² a)]	14	≤	-
Airtightness	Pressurization test result (n ₅₀) [1/h]	0,3	≤	1,0
Non-renewable primary energy (PE)	PE demand [kWh/(m ² a)]	39	≤	0
Renewable primary energy (PER)	PER-demand [kWh/(m ² a)]	33	≤	0
	Generation (reference to ground area) [kWh/(m ² a)]	128	≥	30
Component quality				
	Building envelope to ambient air (U-value) [W/(m ² K)]	0,11	≤	0,15
	Building envelope to ground (U-value) [W/(m ² K)]	0,26	≤	0,28
	Windows/Exterior doors (U _{w,installed}) [W/(m ² K)]	0,78	≤	0,85
	Glazing (g-value) [-]	0,50	≥	-
	Glazing/shading (max. solar load) [kWh/(m ² a)]	13	≤	-
	Ventilation (effect. heat recovery efficiency) [%]	82	≥	75

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

Passivetown, 22. February 2022

Certifier: Paul Passive, Passive House Institute