

Certificate

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



Mead:
Energy &
Architectural
Design Ltd.

Authorised by:



**Kinver, 51 Oakthorpe Road and
Basement Flat, 51 Oakthorpe Road, Oxford, OX2 7BD,
United Kingdom/ Britain**



Client	Guy & Susan Hargreaves Kinver, 51 Oakthorpe Road OX2 7BD Oxford, United Kingdom/ Britain
Architect	Eco Design Consultants South Pavillion, MK Art Centre, Parklands MK14 5DZ Milton Keynes, United Kingdom/ Britain
Building Services	Williams Energy Design Woodhouse, Shalford Green CM7 5AY Braintree, United Kingdom/ Britain
Energy Consultant	Eco Design Consultants South Pavillion, MK Art Centre, Parklands MK14 5DZ Milton Keynes, United Kingdom/ Britain

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 Classic' standard:

Building quality			This building	Criteria	Alternative criteria
Heating	Heating demand	[kWh/(m ² a)]	16	≤	25
Cooling	Cooling + dehumidification demand	[kWh/(m ² a)]	1	≤	15
	Cooling load	[W/m ²]	9	≤	10
Airtightness	Pressurisation test result (n ₅₀)	[1/h]	1.0	≤	1.0
Non-renewable primary energy (PE)	PE demand	[kWh/(m ² a)]	103	≤	136
Component quality					
	Building envelope to ambient air (U-value)	[W/(m ² K)]	0.15	≤	-
	Building envelope to ground (U-value)	[W/(m ² K)]	0.28	≤	-
	Wall with interior insulation to ambient air (U-value)	[W/(m ² K)]	0.22	≤	-
	Wall with interior insulation to ground (U-value)	[W/(m ² K)]	0.12	≤	-
	Windows/Exterior doors (U _{w,installed})	[W/(m ² K)]	0.87	≤	-
	Windows (U _{w,installed})	[W/(m ² K)]	0.88	≤	-
	Glazing (g-value)	[-]	0.56	≥	-
	Glazing/shading (max. solar load)	[kWh/(m ² a)]	235	≤	-
	Ventilation (effect. heat recovery efficiency)	[%]	81	≥	-

17.07.2024

Certifier: Kym Mead, Mead Consulting Ltd