Certificate

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



Authorised by:



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XXXXXXX United Kingdom/ Britain



| Client | VVVVVUnited Kingdom/ Britain | | | | | |
|------------|------------------------------------------|--|--|--|--|--|
| | | | | | | |
| Architect | Ruth Butler Architects | | | | | |
| | 7 Convent Lane | | | | | |
| | PO10 7JJ, United Kingdom/ Britain | | | | | |
| Building | Cundall | | | | | |
| Services | 1 Carter Lane | | | | | |
| | EC4V 5ER London, United Kingdom/ Britain | | | | | |
| Energy | Cundall | | | | | |
| Consultant | 1 Carter Lane | | | | | |
| | EC4V 5ER London, 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 buildin | g | Criteria | | Iternative criteria | |
|--------------------------------------------------------|----------------------------|---------------------------------|--------------------|--------------|--------------|----|----------|----|------------------------|--|
| Heating | | Heating o | demand | [kWh/(m²a)] | 19 | ≤ | 20 | | - | |
| Cooling | Frequency | of overheating (> | 25 ℃) | [%] | 0 | ≤ | 10 | | | |
| Airtightness | Pr <mark>essurizati</mark> | on test result | (n ₅₀) | [1/h] | 0.5 | ≤ | 1.0 | | | |
| Renewable primary energy (PER) PER-demand | | | [kWh/(m²a)] | 72 | ≤ | 66 | | 72 | | |
| | Generation (r | <mark>efere</mark> nce to groun | ıd area) | [kWh/(m²a)] | 17 | ≥ | - | | 8 | |
| Component quality | | | | | | | | | | |
| Building envelope to ambient air (U-value) | | | | $[W/(m^2K)]$ | 0.16 | ≤ | - | | | |
| Building envelope to ground (U-value) | | | | $[W/(m^2K)]$ | 0.18 | ≤ | - | | | |
| Wall with interior insulation to ambient air (U-value) | | | | $[W/(m^2K)]$ | 0.25 | ≤ | - | | | |
| Windows/E | Exterior doors (| Uw,installed) | | $[W/(m^2K)]$ | 0.75 | ≤ | - | | | |
| | | Glazing (g | g-value) | [-] | 0.62 | ≥ | - | | | |
| Glazing/shading (max. so <mark>lar load)</mark> | | | | [kWh/(m²a)] | 299 | ≤ | - | | | |
| Ventilation (effect. heat recovery efficieny) | | | | [%] | 68 | ≥ | - | | | |

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Certifier: Kym Mead, Mead Ltd