Regents Park Medical Centre, Euston Road, London

SRE

Building Regulations 2021

Building Type	Address	As-Designed/ As-Built Drawings	SBEM Level	Weather File	BER $kgCO_2/m^2.annum$	TER $kgCO_2/m^2.annum$	BER/TER Improvement (%)
C2 : Hospital (Hospital)	Regents Park Medical Centre, Euston Road, London, NW1 3AD	As-Designed	5	London TRY	3.11	6.21	49.92%

Construction Element	U-Value	U-Value (Part L Limiting)	Description (Outside to inside)
Basement/Ground floor	0.14	0.18	Pile foundation (U - value and construction details are indicative only; to be confirmed during detailed stage)
External wall	0.18	0.26	100mm external skin, 10mm cavity, 90mm EcoTherm Eco-cavity insulation, 100mm Lightweight internal skin (U - value and construction details are indicative only; to be confirmed during detailed stage)
Internal Partitions	0.82	_	Stud Wall (TBC)
Internal Floors	0.37	_	200mm Timber joists (U - value and construction details are indicative only; to be confirmed during detailed stage)
Roof (Flat roof)	0.14	0.18	150mm timber joist, 100mm insulation, single ply membrane covering (U - value and construction details are indicative only; to be confirmed during detailed stage)
Roof (Green roof)	0.10	0.18	Green Roof System, Waterproofing, Vapour Control Layer, 18mm Plywood , 200mm PIR Insulation (0.022 W/mK), 200mm Timber Joists, 12.5mm Plasterboard (U - value and construction details are indicative only; to be confirmed during detailed stage)
Roof (Pitched roof)	0.14	0.16	150mm timber joist, 100mm insulation, single ply membrane covering (U - value and construction details are indicative only; to be confirmed during detailed stage)

Construction Element	U-Value	U-Value (Part L Limiting)	G Value	Frame Factor	Description (manufacturer, make and model)
Windows and Glazed doors	1.20	1.60	0.40	10%	Double glazed , whole window U-Value
Skylights	1.20	2.20	0.40	10%	Double glazed , whole window U-Value

Construction Notes	Description (manufacturer, make and model)	
Air permeability	5 $m^3/hr/m^2$	Targeted

Heating and Cooling	System Details	Emitter	Controls
Heating System 1	Air Source Heat Pumps (SCOP 4.8) For Space Heating Only (To all spaces except plant room)	Ceiling Cassettes	Central time control, Local temperature control

Hot Water (Same as Space Heating)	System Details	Location	Secondary Circulation	Circulation Losses (W/m)	Pump Power (kW)	Loop Length (m)	Storage Tank (l)	Storage Losses (kWh/l.day)	Delivery Efficiency (%)
Hot Water System 1	Electric Standalone Hot water system	WCs	N	n/a	N	N	n/a	n/a	100

Ventilation	System Details	SFP (W/l/s)	Leakage tested ductwork CEN Classification	AHU CEN leakage standards class	Heat Recovery	Heat Recovery Efficiency (%)	Heat Recovery Type	Variable HR
Mechanical Ventilation with Heat Recovery (MVHR)	MVHR with CO2 sensors (To all spaces except plant room)	0.90	_	_	Y	75	_	N

Electrical Flow Control		Description
Power Correction Factor	N	<0.90
Separate Metering	N	n/a

Renewables	Description
PV	10.2 m^2 southeast facing PV panels at 10 degree inclination from horizontal, 147 degree azimuth and a nominal efficiency of 21%
Solar Water Heating	N
Wind Turbine	N

Lighting	Description (As per the lighting layouts in the maintenance manual and site visit data)
Lighting	LED lighting (125lm/W, LOR 1)
Lighting Controls	Passive Infrared (PIR) sensors to all spaces (Automatic ON and OFF) Daylight sensors in all spaces with windows
Parasitic Power	0.1 W/m2 assumed for stand alone PIR sensors. 0.1 W/m2 assumed for the combination of Daylight and PIR sensors.

Sign Off of details	Name	Alisha Pinheiro / Meeradevi Kathaliyil	Date	05.12.2024	By signing this document, I declare that the aforementioned details are all correct as per the final "as designed" specifications:	Name		Date	
						Sign			

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