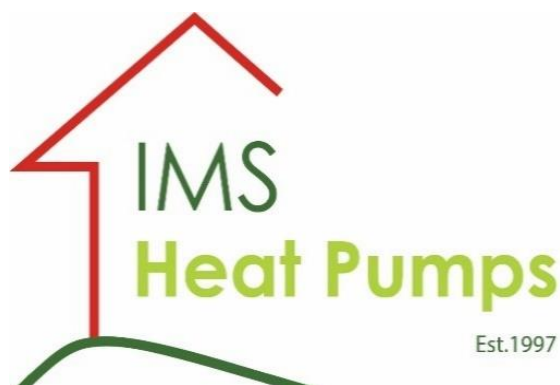


PROJECT INFORMATION

Customer	Prism AG	
Project	81 Swallow Hill Road	
Location	S75 1LY	
Design outdoor temperature	-2.8	°C
Annual average temperature	10	°C
Floor area	292.65	m ²
Peak power demand	8.19	kW
Annual heating energy demand	18814	kWh
Annual hot water energy demand	3057	kWh
Total energy demand	21871	kWh



HEAT PUMP SYSTEM INFORMATION

Manufacturer	Vaillant	
Model	aroTHERM+ 10	
MCS registration number	KIWA 00016/022 HP	
Heat pump type	Air Source	
Required electricity supply	single phase	230V

AUXILIARY HEATER (if applicable)

Type	integral immersion	
Energy coverage	0.0%	
Energy supplied/yr	0	kWh

SPACE HEATING INFORMATION

Heat emitter type	underfloor heating & radiators	
Design flow temperature (°C)	41	
System circulation pump	Grundfos Alpha2 25/50	
Heat pump power @ DOT	9.5	kW
Power coverage	100%	
Total energy provided	18814	kWh
Energy coverage	100.0%	
Heating SCOP	4.49	
MCS star rating	****	
FLEQ run hours	2302	

FUEL COST & CARBON FACTORS

	p/kWh	kg CO ₂ /kWh
Electricity	£0.2236	0.225
Oil	£0.0900	0.298
LPG	£0.0870	0.24
Mains gas	£0.0548	0.213
Coal/solid fuel	£0.0890	0.404
Woodchip	£0.1380	0.048

Sources: Energy Saving Trust

www.energysavingtrust.org.uk/about-us/our-data

Ofgem energy cap:

<https://www.ofgem.gov.uk/>

DOMESTIC HOT WATER INFORMATION

Total energy provided	3057	kWh
Hot water energy coverage	100%	
Hot water heating flow temp	55°C	
Hot water SCOP	3.58	
Immersion heater cycle	weekly	
Minimum cylinder volume	180	litres
Specified cylinder volume	180	litres
Re-heat time - SUMMER	60	minutes
Re-heat time - WINTER	120	minutes

INFLATION RATE

Consumer Prices Index (CPI)	8.60%
Electricity price inflation (est)	54.00%
oil/gas price inflation (est)	98.50%

www.ons.gov.uk/economy/inflationandpriceindices

HEAT PUMP ELECTRICITY CONSUMPTION

Space heating	4190 kWh / yr	
Hot water heating	854 kWh / yr	
Immersion heater	109 kWh / yr	
Circulation pump	74 kWh / yr	
Total electricity consumed	5227 kWh / yr	
Aux heater fuel	0 kWh / yr	
Estimated Heat Pump fuel cost	£1,169	per year

ALTERNATIVE OPTION TO A HEAT PUMP

Boiler type	Mains Gas Boiler
Efficiency	90%

Estimated fuel cost £1,348 per year

The performance of microgeneration heat pump systems is impossible to predict with certainty due to the variability of the climate and its subsequent effect on both heat supply and demand. This estimate is given as guidance only and should not be considered a guarantee.