Predicted Energy Assessment

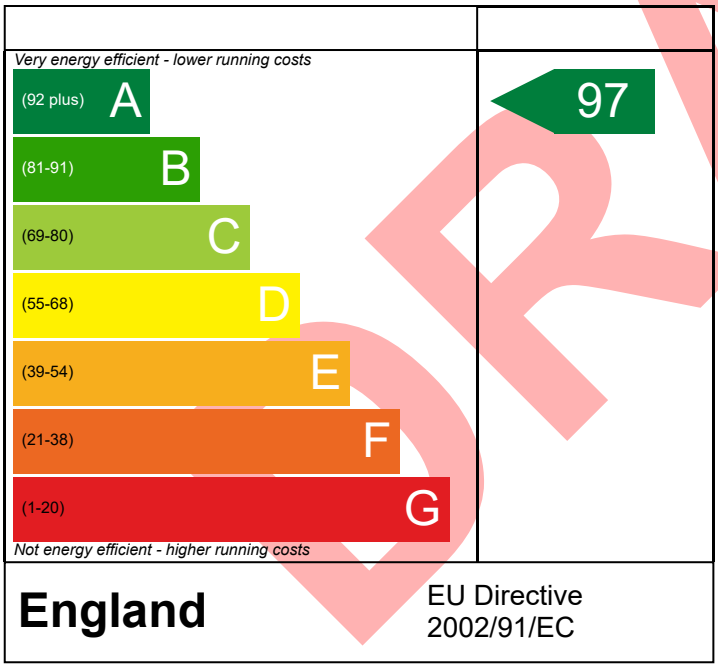
Plot 4, Rovers Way, Doncaster

Dwelling type:	House, Semi-Detached
Date of assessment:	25/04/2025
Produced by:	Simon Nind
Total floor area:	95.04 m²
DRRN:	

This document is a Predicted Energy Assessment for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, this rating will be updated and an official Energy Performance Certificate will be created for the property. This will include more detailed information about the energy performance of the completed property.

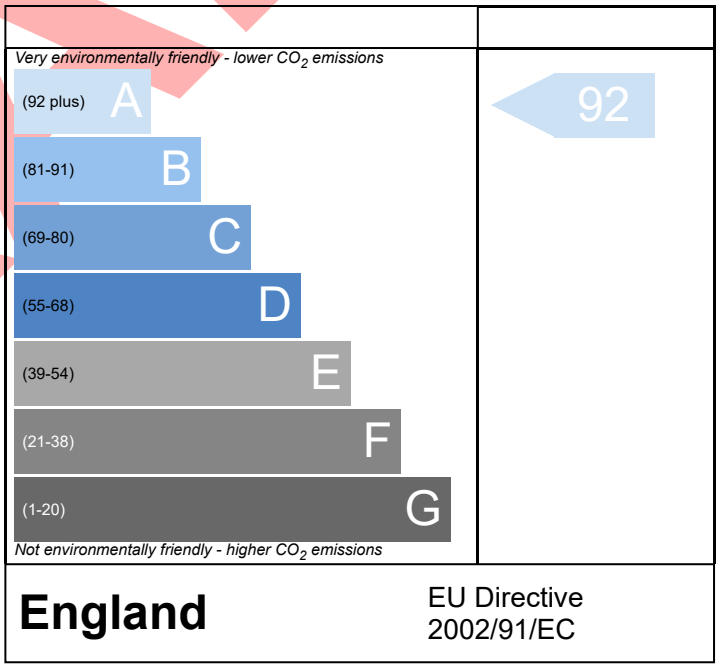
The energy performance has been assessed using the Government approved SAP 10 methodology and is rated in terms of the energy use per square meter of floor area; the energy efficiency is based on fuel costs and the environmental impact is based on carbon dioxide (CO2) emissions.

Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

Environmental Impact (CO_2) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO_2) emissions. The higher the rating the less impact it has on the environment.

Summary for Input Data

elmhurst energy

Property Reference	Plot 4	**Issued on Date**	25/04/2025
Assessment Reference	00001	**Prop Type Ref**	
Property	Plot 4, Rovers Way, Doncaster		

SAP Rating	97 A	**DER**	9.41	**TER**	10.86
Environmental	92 A	**% DER < TER**			13.35
CO_2 Emissions (t/year)	0.84	**DFEE**	32.10	**TFEE**	35.59
Compliance Check	See BREL	**% DFEE < TFEE**			9.81
% DPER < TPER	13.05	**DPER**	49.31	**TPER**	56.71

Assessor Details	Mr. Simon Nind	**Assessor ID**	6133-0002
Client	Swan, Swan Homes		

SUMMARY FOR INPUT DATA FOR: New Build (As Designed)

Orientation	North	
Property Tenture	1	
Transaction Type	6	
Terrain Type	Suburban	
1.0 Property Type	House, Semi-Detached	
2.0 Number of Storeys	2	
3.0 Date Built	2022	
4.0 Sheltered Sides	1	
5.0 Sunlight/Shade	Average or unknown	
6.0 Thermal Mass Parameter	Precise calculation	
Thermal Mass	315.16	kJ/m²K
7.0 Electricity Tariff	7 Hour Off Peak	
Smart electricity meter fitted	Yes	
Smart gas meter fitted	No	

7.0 Measurements

	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
Ground floor:	19.50 m	47.52 m²	2.40 m
1st Storey:	19.50 m	47.52 m²	2.60 m

8.0 Living Area	36.77	m²

9.0 External Walls

Description	Type	Construction	U-Value (W/m²K)	Kappa (kJ/m²K)	Gross Area(m²)	Nett Area (m²)	Shelter Res	Shelter	Openings	Area Calculation Type
External Wall 1	Cavity Wall	Cavity wall; plasterboard on dabs or battens, lightweight aggregate block, filled cavity, any outside structure	0.18	110.00	97.50	82.26	0.00	None	15.24	Calculate Wall Area

9.1 Party Walls

Description	Type	Construction	U-Value (W/m²K)	Kappa (kJ/m²K)	Area (m²)	Shelter Res	Shelter
Party Wall 1	Filled Cavity with Edge Sealing	Dense plaster both sides, dense blocks, cavity or cavity fill	0.00	180.00	49.50		None

9.2 Internal Walls

Description	Construction	Kappa (kJ/m²K)	Area (m²)
Internal Wall 1	Dense block, plasterboard on dabs	75.00	56.64
Internal Wall 2	Plasterboard on timber frame	9.00	89.76

10.0 External Roofs

Description	Type	Construction	U-Value (W/m²K)	Kappa (kJ/m²K)	Gross Area(m²)	Nett Area (m²)	Shelter Code	Shelter Factor	Calculation Type	Openings
External Roof 1	External Plane Roof	Plasterboard, insulated at ceiling level	0.12	9.00	47.52	47.52	None	0.00	Enter Gross Area	0.00

10.2 Internal Ceilings

Description	Storey	Construction	Area (m²)
Internal Ceiling 1	Lowest occupied	Plasterboard ceiling, carpeted chipboard floor	47.52

11.0 Heat Loss Floors

Summary for Input Data

elmhurst energy

Description	Type	Storey Index	Construction	U-Value (W/m²K)	Shelter Code	Shelter Factor	Kappa (kJ/m²K)	Area (m²)
Heatloss Floor 1	Ground Floor - Solid	Lowest occupied	Slab on ground, screed over insulation	0.12	None	0.00	110.00	47.52

11.2 Internal Floors

Description	Storey Index	Construction	Kappa (kJ/m²K)	Area (m²)
Internal Floor 1		Plasterboard ceiling, carpeted chipboard floor	9.00	47.52

12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m²K)
Door	Manufacturer	Half Glazed Door	Double glazed			0.76		0.70	1.40
Windows	Manufacturer	Window	Double glazed			0.76		1.00	1.40

13.0 Openings

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
Front door	Door	External Wall 1	North	2.10	
Side windows	Windows	External Wall 1	West	2.16	
Front windows	Windows	External Wall 1	North	5.04	
Rear windows	Windows	External Wall 1	South	5.94	

14.0 Conservatory	None	
15.0 Draught Proofing	100	%
16.0 Draught Lobby	No	
17.0 Thermal Bridging	Calculate Bridges	

17.1 List of Bridges

Bridge Type	Source Type	Length	Psi	Adjusted	Reference:	Imported
E2 Other lintels (including other steel lintels)	Independently assessed	10.60	0.02	0.02	Building Alliance CIC	No
E3 Sill	Independently assessed	9.60	0.02	0.02	Building Alliance CIC	No
E4 Jamb	Independently assessed	30.00	0.02	0.02	Building Alliance CIC	No
E5 Ground floor (normal)	Independently assessed	19.50	0.05	0.05	Building Alliance CIC	No
E10 Eaves (insulation at ceiling level)	Independently assessed	5.04	0.06	0.06	Building Alliance CIC	No
E16 Corner (normal)	Independently assessed	10.00	0.04	0.04	Building Alliance CIC	No
E12 Gable (insulation at ceiling level)	Independently assessed	9.90	0.04	0.04	Building Alliance CIC	No
E18 Party wall between dwellings	Independently assessed	10.00	0.04	0.04	Building Alliance CIC	No
P1 Party wall - Ground floor	Independently assessed	9.90	0.04	0.04	Building Alliance CIC	No
P2 Party wall - Intermediate floor within a dwelling	Table K1 - Default	9.90	0.00	0.00		No
P4 Party wall - Roof (insulation at ceiling level)	Table K1 - Default	9.90	0.48	0.48		No
E6 Intermediate floor within a dwelling	Independently assessed	19.50	0.00	0.00	Building Alliance CIC	No

Y-value	0.04	W/m²K

19.0 Mechanical Ventilation

Mechanical Ventilation

Mechanical Ventilation System Present	No

20.0 Fans, Open Fireplaces, Flues

Number of open chimneys	0
Number of open flues	0
Number of chimneys/flues attached to closed fire	0
Number of flues attached to solid fuel boiler	0
Number of flues attached to other heater	0
Number of blocked chimneys	0
Number of intermittent extract fans	4
Number of passive vents	0
Number of flueless gas fires	0

21.0 Fixed Cooling System	No	
22.0 Pressure Testing	Yes	
Designed AP_{50}	5.00	m³/(h.m²) @ 50 Pa
Test Method	Blower Door	

22.0 Lighting

No Fixed Lighting	No				
	Name	**Efficacy**	**Power**	**Capacity**	**Count**
	Lighting 1	75.00	5.00	375.00	10

24.0 Main Heating 1	Database	

Summary for Input Data

Percentage of Heat	100.00	%
Database Ref. No.	17929	
Fuel Type	Mains gas	
In Winter	89.00	
In Summer	87.30	
Model Name	LOGIC COMBI	
Manufacturer	Ideal Boilers	
System Type	Combi boiler	
Controls SAP Code	2112	
Delayed Start Stat	Yes	
Flue Type	Balanced	
Fan Assisted Flue	Yes	
Is MHS Pumped	Pump in heated space	
Heating Pump Age	2013 or later	
Heat Emitter	Radiators and Underfloor	
Underfloor Heating	Yes - Pipes in thin screed	
Flow Temperature	Enter value	
Flow Temperature Value	45.00	
Combi boiler type	Standard Combi	
Combi keep hot type	None	

25.0 Main Heating 2	None
26.0 Heat Networks	None
27.0 Secondary Heating	None

28.0 Water Heating

Water Heating	Main Heating 1
SAP Code	901
Flue Gas Heat Recovery System	No
Waste Water Heat Recovery Instantaneous System 1	No
Waste Water Heat Recovery Instantaneous System 2	No
Waste Water Heat Recovery Storage System	No
Solar Panel	No
Water use <= 125 litres/person/day	Yes
Cold Water Source	From mains
Bath Count	1

28.1 Showers

Description	Shower Type	Flow Rate [l/min]	Rated Power [kW]	Connected	Connected To
shower	Vented hot water system	7.00		Yes	Storage System
Shower 2	Vented hot water system	7.00		Yes	Storage System

28.3 Waste Water Heat Recovery System

29.0 Hot Water Cylinder	None
In Airing Cupboard	No

32.0 Photovoltaic Unit	One Dwelling
Export Capable Meter?	Yes
Connected To Dwelling	Yes
Diverter	No
Battery Capacity [kWh]	0.00

Summary for Input Data

PV Cells kWp	Orientation	Elevation	Overshading	FGHRS	MCS Certificate	Overshading Factor	MCS Certificate Reference	Panel Manufacturer
3.00	South	30°	None Or Little		No	1.00		

34.0 Small-scale Hydro None

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Recommendations

Lower cost measures

None

Further measures to achieve even higher standards

	Typical Cost	Typical savings per year	Ratings after improvement	
			SAP rating	Environmental Impact
			A 97	A 93
			0	0
			0	0

Thermal Bridging

elmhurst energy

Property Reference	Plot 4	**Issued on Date**	25/04/2025
Assessment Reference	00001	**Prop Type Ref**	Semi-Detached House
Property	Plot 4, Rovers Way, Doncaster		

SAP Rating	97 A	**DER**	9.41	**TER**	10.86
Environmental	92 A	**% DER < TER**			13.35
CO_2 Emissions (t/year)	0.84	**DFEE**	32.10	**TFEE**	35.59
Compliance Check	See BREL	**% DFEE < TFEE**			9.81
% DPER < TPER	13.05	**DPER**	49.31	**TPER**	56.71

Assessor Details	Mr. Simon Nind	**Assessor ID**	6133-0002
Client	Swan, Swan Homes		

	Junction details	Source Type	Psi (W/mK)	Length (m)	Result	Reference
External wall	E2 Other lintels (including other steel lintels)	Independently assessed	0.020	10.60	0.21	Building Alliance CIC
External wall	E3 Sill	Independently assessed	0.021	9.60	0.20	Building Alliance CIC
External wall	E4 Jamb	Independently assessed	0.016	30.00	0.48	Building Alliance CIC
External wall	E5 Ground floor (normal)	Independently assessed	0.049	19.50	0.96	Building Alliance CIC
External wall	E10 Eaves (insulation at ceiling level)	Independently assessed	0.060	5.04	0.30	Building Alliance CIC
External wall	E16 Corner (normal)	Independently assessed	0.035	10.00	0.35	Building Alliance CIC
External wall	E12 Gable (insulation at ceiling level)	Independently assessed	0.035	9.90	0.35	Building Alliance CIC
External wall	E18 Party wall between dwellings	Independently assessed	0.042	10.00	0.42	Building Alliance CIC
Party wall	P1 Party wall - Ground floor	Independently assessed	0.037	9.90	0.37	Building Alliance CIC
Party wall	P2 Party wall - Intermediate floor within a dwelling	Table K1 - Default	0.000	9.90	0.00	
Party wall	P4 Party wall - Roof (insulation at ceiling level)	Table K1 - Default	0.480	9.90	4.75	
External wall	E6 Intermediate floor within a dwelling	Independently assessed	0.001	19.50	0.02	Building Alliance CIC

Total: 153.84 W/mK:

Y-Value: 0.04 W/m²K:

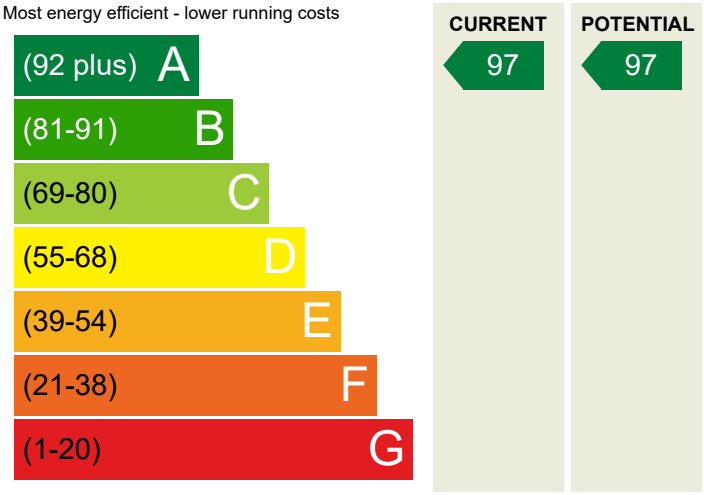
Energy Report

Dwelling Address	Plot 4, Rovers Way, Doncaster
Reference	Plot 4-00001
Assessment Date	06/06/2024
Submission Date	
Property Type	House, Semi-Detached
Total Floor Area	95

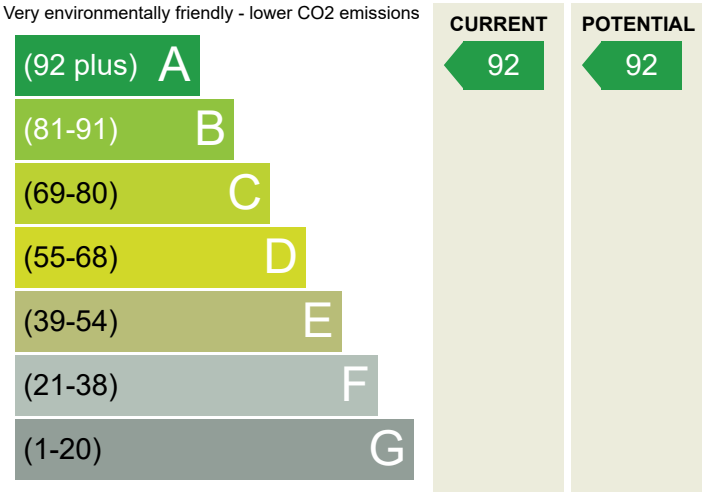
This Energy Report has been generated using the UK's National Calculation Methodology for dwellings, Standard Assessment Procedure (SAP). This methodology is used to assess the energy efficiency of dwellings which is calculated based on a dwelling's heating, hot water, ventilation and lighting usage.

This document is not an Energy Performance Certificate (EPC) as required by the Energy Performance of Buildings Regulations

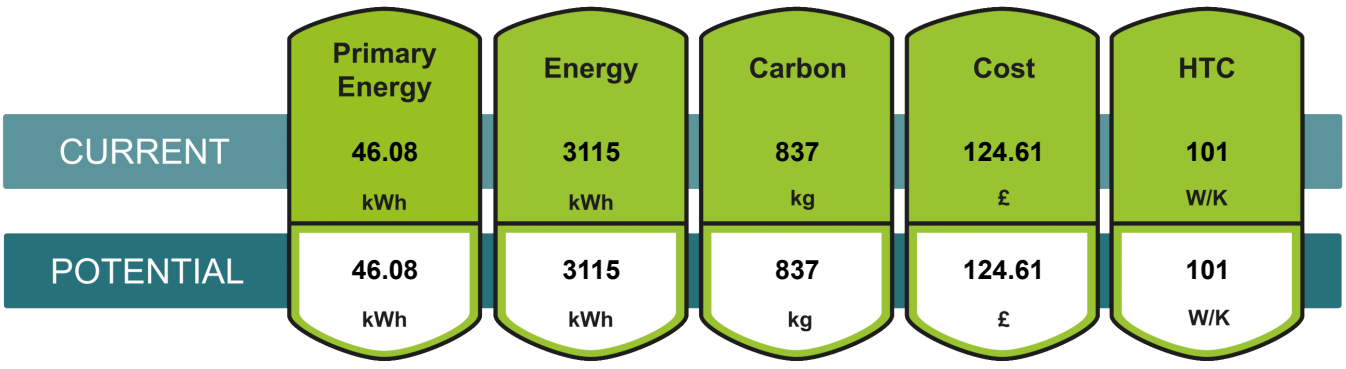
Energy Efficiency Rating



Carbon Dioxide (CO2) Emissions Rating



Additional ratings for your home



Energy Report

Breakdown of property's energy performance

Each feature is assessed as one of the following:

Very Poor | Poor | Average | Good | Very Good

Feature	Description	Energy Performance
Walls	Average thermal transmittance 0.18 W/m²K	Very Good
Roof	Average thermal transmittance 0.12 W/m²K	Very Good
Floor	Average thermal transmittance 0.12 W/m²K	Very Good
Windows	High performance glazing	Good
Main heating	Boiler with radiators and underfloor heating, mains gas	Good
Main heating controls	Time and temperature zone control	Very Good
Secondary heating	None	
Hot water	From main system	Very Good
Lighting	Good lighting efficiency	Good
Air tightness	Air permeability [AP50] = 5.0 m³/h.m² (assumed)	Good

Recommendations

The recommended measures provided below will help to improve the energy efficiency of the dwelling.
To reach the dwelling's potential energy rating all of the recommended measures shown below would need to be installed.
Having these measures installed individually or in any other order may give a different result when compared with the cumulative potential rating.

Recommended measures	Cumulative savings (per year)	Cumulative rating	Typical costs	Incremental savings (per year)	Cumulative CO2 rating
Solar water heating	£18	A 97			A 93

The typical cost is based on average installation prices across the country so may not be representative of the actual costs in your area.

Energy Report

Estimated energy costs of the dwelling

The table below shows the estimated running costs of the space and water heating and lighting within the dwelling. It does not include the energy used from household appliances. The estimated annual costs after potential improvements indicates the total energy cost if all recommended measures named above were installed.

	Estimated annual costs	Estimated annual costs after potential improvements	Potential future savings
Lighting	£81	£81	
Heating	£276	£276	
Hot Water	£148	£148	
New Technologies e.g. Impact of PV	-(£380)	-(£380)	
TOTAL	£125	£125	

Estimated energy use and potential savings

Space Heating
2699
kWh per year

Water Heating
2645
kWh per year

Energy Report

About this document

Created by:	
Company/Trading name:	
Phone number:	
Email address:	

Disclaimer

This Energy Report should not under any circumstances be treated as a Condition Survey and cannot be used to indicate that any element of the dwelling (e.g.heating system) is working correctly.
This Energy Report must not be used in situations where an Energy Performance Certificate (EPC) is required.
This Energy Report is generated from a set of data inputs which may not reflect the actual dimensions, services or construction of the dwelling.
The calculation used to generate this report reflects the SAP Methodology current at the time of report generation.

Glossary terms for additional metrics

Primary Energy	The measure of the energy required for lighting, heating and hot water in a property. This includes the efficiency of the property's heating system, power station efficiency for electricity and the energy used to produce the fuel and deliver it to the property.
Energy Used	The estimated amount of fuel energy for lighting, heating and hot water for the property. The estimate is based on typical usage which is likely to be different to actual consumption.
Carbon (CO2)	The current emissions based on the energy estimates.
Cost	The estimated cost of energy. The cost of each unit of fuel is based on an industry standard which is likely to be different to those the occupier actually pays.
Heat Transfer Coefficient	Heat flow through the property envelope where internal and external temperatures are different.

Dwelling Sign Off Report

Property Reference	Plot 4	**Issued on Date**	25/04/2025
Assessment Reference	00001	**Prop Type Ref**	Semi-Detached House
Property	Plot 4, Rovers Way, Doncaster		

SAP Rating	97 A	**DER**	9.41	**TER**	10.86
Environmental	92 A	**% DER < TER**			13.35
CO_2 Emissions (t/year)	0.84	**DFEE**	32.10	**TFEE**	35.59
Compliance Check	See BREL	**% DFEE < TFEE**			9.81
% DPER < TPER	13.05	**DPER**	49.31	**TPER**	56.71

Assessor Details	Mr. Simon Nind	**Assessor ID**	6133-0002
Client	Swan, Swan Homes		

This report should be used for a client to confirm key assessment details for production of Energy Performance Certificates and should be retained as documentary evidence. It cannot be used in lieu of a BREL/BRWL/Compliance report for demonstrating Building Regulation compliance.

Section 1: Dwelling Information

Dwelling Address (Please confirm final postal address and post code of the dwelling.)

House Name	Plot 4	
House Number		
Postcode		
Street	Rovers Way	
Town	Doncaster	
County		

Dwelling Orientation North (Please confirm orientation of main entrance door of the dwelling.)

Comments

Terrain Type Suburban

Property Type House, Semi-Detached

Comments

Electricity Tariff 7 Hour Off Peak

Smart electricity meter fitted: Yes

Smart gas meter fitted: No

Comments

Section 2: Dwelling Construction Details

External Walls

Description	External Wall 1	
Type	Cavity Wall	
Construction	Cavity wall; plasterboard on dabs or battens, lightweight aggregate block, filled cavity, any outside structure	
U-value	0.18	W/m²K U-value calculations should be provided to verify the u-value entered into the Assessment
Gross Area	97.50	m²

Comments

Party Walls

Description	Type	Construction	U-Value (W/m²K)	Area (m²)
Party Wall 1	Filled Cavity with Edge Sealing	Dense plaster both sides, dense blocks, cavity or cavity fill	0.00	49.50

Comments

External Roofs

Description	External Roof 1		
Type	External Plane Roof		
Construction	Plasterboard, insulated at ceiling level		
U-value	0.12	W/m²K	U-value calculations should be provided to verify the u-value entered into the Assessment
Gross Area	47.52	m²	

Comments

Heat Loss Floors

Description	Heatloss Floor 1		
Type	Ground Floor - Solid		
Construction	Slab on ground, screed over insulation		
U-value	0.12	W/m²K	U-value calculations should be provided to verify the u-value entered into the Assessment
Area	47.52	m²	

Comments

Opening Types

Description	Data Source	Type	Glazing	G-value	Frame Type	U-Value (W/m²K)
Door	Manufacturer	Half Glazed Door	Double glazed	0.76		1.40
Windows	Manufacturer	Window	Double glazed	0.76		1.40

Comments

Openings

Name	Opening Type	Location	Orientation	Area (m²)
Front door	Door	External Wall 1	North	2.10
Side windows	Windows	External Wall 1	West	2.16
Front windows	Windows	External Wall 1	North	5.04
Rear windows	Windows	External Wall 1	South	5.94

Comments

Thermal Bridging Calculate Bridges

List of Bridges

Bridge Type	Source Type	Length (m)	Psi (W/mK)	Reference
E2 Other lintels (including other steel lintels)	Independently assessed	10.60	0.02	Building Alliance CIC
E3 Sill	Independently assessed	9.60	0.02	Building Alliance CIC
E4 Jamb	Independently assessed	30.00	0.02	Building Alliance CIC
E5 Ground floor (normal)	Independently assessed	19.50	0.05	Building Alliance CIC
E10 Eaves (insulation at ceiling level)	Independently assessed	5.04	0.06	Building Alliance CIC
E16 Corner (normal)	Independently assessed	10.00	0.04	Building Alliance CIC
E12 Gable (insulation at ceiling level)	Independently assessed	9.90	0.04	Building Alliance CIC
E18 Party wall between dwellings	Independently assessed	10.00	0.04	Building Alliance CIC
P1 Party wall - Ground floor	Independently assessed	9.90	0.04	Building Alliance CIC
P2 Party wall - Intermediate floor within a dwelling	Table K1 - Default	9.90	0.00	
P4 Party wall - Roof (insulation at ceiling level)	Table K1 - Default	9.90	0.48	
E6 Intermediate floor within a dwelling	Independently assessed	19.50	0.00	Building Alliance CIC

Y-value 0.044

Comments

Where specific construction details have been used documentary evidence should be provided to the SAP assessor, usually in the form of signed checklists.

Pressure Testing Yes

Designed AP_{50} 5.00 $m^3/(h.m^2)$ @ 50 Pa

Property Tested? Yes

Test Method Blower Door

Where an air pressure test has been carried out a copy of the test certificate should be forwarded to the SAP assessor.

Comments

Section 3: Dwelling Systems

Fans, Open Fireplaces, Flues

Number of open chimneys	0
Number of open flues	0
Number of chimneys/flues attached to closed fire	0
Number of flues attached to solid fuel boiler	0
Number of flues attached to other heater	0
Number of blocked chimneys	0
Number of intermittent extract fans	4
Number of passive vents	0
Number of flueless gas fires	0

Comments

Fixed Cooling System No

Comments

Lighting

No Fixed Lighting: No

Name	Efficacy (lm/W)	Power (W)	Capacity (lm)	Count
Lighting 1	75.00	5.00	375.00	10

Comments

Main Heating 1 Database

Fuel Type	Mains gas	
Winter Efficiency	89.00	%
Summer Efficiency	87.30	%
Model Name	LOGIC COMBI	
Manufacturer	Ideal Boilers	
System Type	Combi boiler	
Flue Type	Balanced	
Fan Assisted Flue	Yes	
Heat Emitter	Radiators and Underfloor	
Flow Temperature	Enter value	
Flow Temperature Value	45.00	

Comments

Heating Controls

Description	Time and temperature zone control by device in PCDB
Boiler Interlock	Yes
Delayed Start Stat	Yes
PCDF Control Description	

Comments

Main Heating 2	None
Secondary Heating	None

Water Heating System

Water Heating	Main Heating 1
Supplementary Immersion	No
SAP Code	901
Water use <= 125 l/p/day	Yes
Cold Water Source	From mains
Number of baths	1

Comments

Hot Water Cylinder None

Comments

Showers

Description	Shower Type	Flow Rate [l/min]	Rated Power [kW]	Connected	Connected To
shower	Vented hot water system	7.00		Yes	Storage System
Shower 2	Vented hot water system	7.00		Yes	Storage System

Comments

Waste Water Heat Recovery System

Comments

Section 4: Dwelling Renewable Energy

Photovoltaic Unit	One Dwelling
Export Capable Meter?	Yes
Connected To Dwelling	Yes
Diverter	No
Battery Capacity [kWh]	0.00

PV Cells kWp	Orientation	Elevation	Overshading	MCS Certificate	Overshading Factor	MCS Certificate Reference	Panel Manufacturer
3.00	South	30°	None Or Little	No	1.00		

Comments

Dwelling Sign Off Report

Section 5: Declaration

I confirm to the best of my knowledge the details provided in this report are an accurate representation of how the dwelling has been constructed.

Signed .....

Date .....