Predicted Energy Assessment

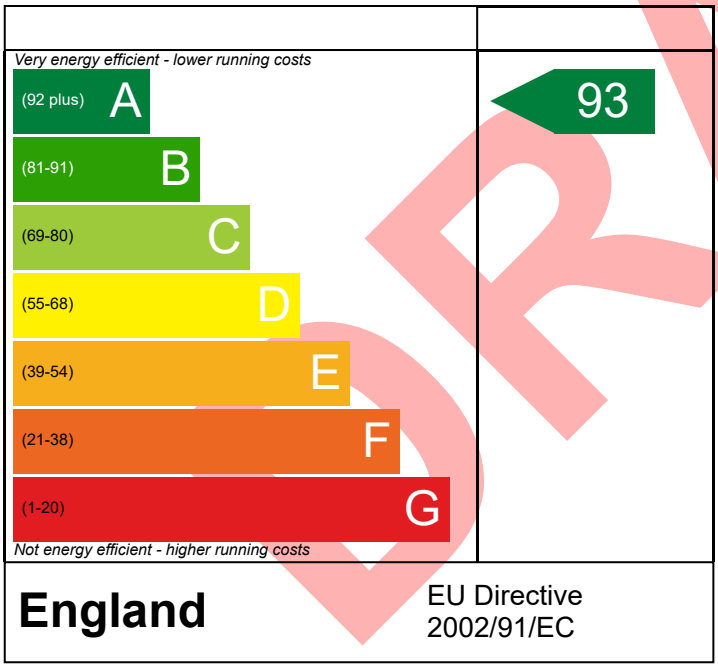
182-184, Bitterne Rd W, Southampton, Hampshire, SO18 1BH

Dwelling type:	Flat, Detached
Date of assessment:	04/04/2024
Produced by:	Kieran Mckerr
Total floor area:	42.42 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.

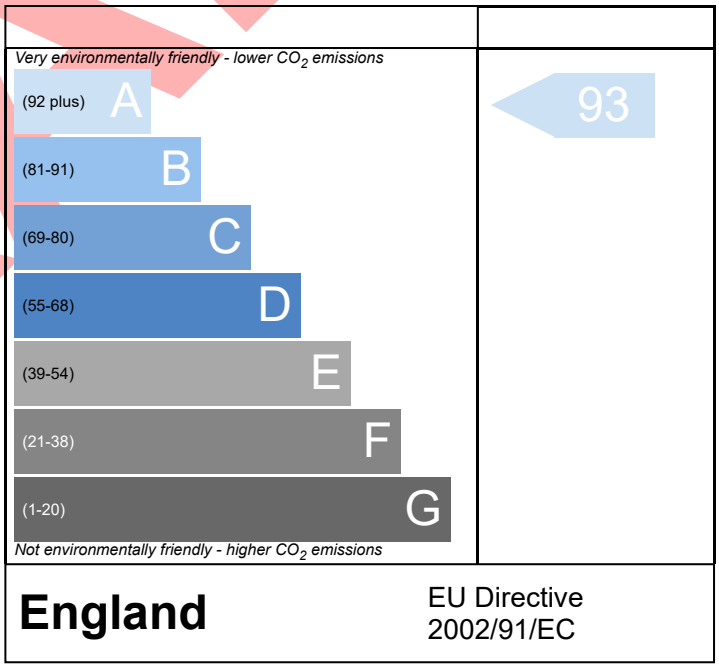
The energy performance has been assessed using the Government approved SAP 10 methodology and is rated in terms of the energy use per square meter of floor area; the energy efficiency is based on fuel costs and the environmental impact is based on carbon dioxide (CO2) emissions.

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	2759	**Issued on Date**	04/04/2024
Assessment Reference	(Gas Boiler) Flat 2 Update	**Prop Type Ref**	
Property	182-184, Bitterne Rd W, Southampton, Hampshire, SO18 1BH		

SAP Rating	93 A	**DER**	11.14	**TER**	15.83
Environmental	93 A	**% DER < TER**			29.63
CO_2 Emissions (t/year)	0.38	**DFEE**	24.52	**TFEE**	36.98
Compliance Check	See BREL	**% DFEE < TFEE**			33.70
% DPER < TPER	33.37	**DPER**	56.39	**TPER**	84.63

Assessor Details	Mr. Kieran Mckerr	**Assessor ID**	BA75-0001
Client	0001, Andrew Jones		

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

Orientation	North
Property Tenture	2
Transaction Type	6
Terrain Type	Suburban
1.0 Property Type	Flat, Detached
Position of Flat	Mid-floor flat
Which Floor	1
2.0 Number of Storeys	1
3.0 Date Built	2023
4.0 Sheltered Sides	2
5.0 Sunlight/Shade	Average or unknown
6.0 Thermal Mass Parameter	Precise calculation
7.0 Electricity Tariff	7 Hour Off Peak
Smart electricity meter fitted	Yes
Smart gas meter fitted	Yes

7.0 Measurements

	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
Ground floor:	21.85 m	42.42 m²	2.30 m

8.0 Living Area 17.88 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	Solid Wall	Solid wall : dense plaster, 210 mm brick, insulated externally	0.14	135.00	39.10	31.73	0.00	None	7.37	Enter Gross Area
Corridor Wall	Solid Wall	Solid wall : dense plaster, 210 mm brick, insulated externally	0.14	135.00	11.17	9.07	1.00	None	2.10	Enter Gross Area

9.2 Internal Walls

Description	Construction	Kappa (kJ/m²K)	Area (m²)
Party Wall	Dense block, plasterboard on dabs	75.00	52.89

10.1 Party Ceilings

Description	Construction	Kappa (kJ/m²K)	Area (m²)
Party Ceiling 1	Other	30.00	42.42

11.0 Heat Loss Floors

Description	Type	Storey Index	Construction	U-Value (W/m²K)	Shelter Code	Shelter Factor	Kappa (kJ/m²K)	Area (m²)
Exposed Floor	Exposed Floor - Solid	Lowest occupied	Other	0.13	None	1.00	120.00	42.42

12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m²K)
Corridor Door	Manufacturer	Door to Corridor							1.00
External Glazing	Manufacturer	Window	Triple Low-E Soft 0.05			0.34		0.83	0.80

13.0 Openings

Summary for Input Data

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
Corridor Door	Corridor Door	Corridor Wall	North	2.10	
South Windows	External Glazing	External Wall	South	3.30	
South West Windows	External Glazing	External Wall	South West	4.07	

14.0 Conservatory	None	
15.0 Draught Proofing	100	%
16.0 Draught Lobby	No	

17.0 Thermal Bridging	User Input	

17.1 List of Bridges

Bridge Type	Source Type	Length	Psi	Adjusted Reference:	Imported
E2 Other lintels (including other steel lintels)		1.00			No
E2 Other lintels (including other steel lintels)		5.35			No
E3 Sill		5.35			No
E3 Sill		1.00			No
E4 Jamb		8.40			No
E4 Jamb		4.20			No
E20 Exposed floor (normal)		21.85			No
E7 Party floor between dwellings (in blocks of flats)		21.85			No
P3 Party wall - Intermediate floor between dwellings (in blocks of flats)		5.23			No

Y-value	0.04	W/m²K
Description	Thermohouse	

18.0 Pressure Testing	Yes	
Designed AP_{50}	3.00	m³/(h.m²) @ 50 Pa
Test Method	Blower Door	

19.0 Mechanical Ventilation

Mechanical Ventilation

Mechanical Ventilation System Present	Yes	
Mechanical Ventilation data Type	Data Sheet	
Type	Balanced mechanical ventilation with heat recovery	
MVHR Duct Insulated	Insulated Ducts	
Manufacturer SFP	0.54	
Duct Type	Rigid	
MVHR Efficiency	89.60	
Wet Rooms	1	
Brand, Model	Flakt Group	
SFP from Installer Commissioning Certificate	No	
MVHR System Location	Outside heated envelope (not installed exclusively)	

20.0 Fans, Open Fireplaces, Flues

21.0 Fixed Cooling System	No	

22.0 Lighting

No Fixed Lighting	No	

Name	Efficacy	Power	Capacity	Count
Lighting 1	100.00	100	10000	1

24.0 Main Heating 1	Database	
Description	Air Source Heat Pump	
Percentage of Heat	100.00	%
Database Ref. No.	18648	
Fuel Type	Mains gas	
In Winter	84.10	
In Summer	98.90	
Model Name	IC Economiser 27 Plus	
Manufacturer	ATAG Verwarming Nederland	
System Type	Combi boiler	

Summary for Input Data

Controls SAP Code	2103
Delayed Start Stat	No
Boiler Compensator	200073
Flue Type	Balanced
Fan Assisted Flue	Yes
Is MHS Pumped	Pump in heated space
Heating Pump Age	2013 or later
Heat Emitter	Underfloor
Underfloor Heating	Yes - Pipes in thin screed
Flow Temperature	Enter value
Flow Temperature Value	55.00
Boiler Interlock	No
Combi boiler type	Standard Combi
Combi keep hot type	None

25.0 Main Heating 2 None

26.0 Heat Networks None

Space Community Heating

	Heat Source	Fuel Type	Heating Use	Efficiency	Percentage Of Heat	Heat	Heat Power Ratio	Electrical	Fuel Factor	Efficiency type
Heat source 1										
Heat source 2										
Heat source 3										
Heat source 4										
Heat source 5										

28.0 Water Heating

Water Heating	Main Heating 1
SAP Code	901
Flue Gas Heat Recovery System	Yes
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 header tank
Bath Count	0

28.1 Showers

Description	Shower Type	Flow Rate [l/min]	Rated Power [kW]	Connected	Connected To

28.2 Flue Gas Heat Recovery System

Database ID	0
Brand Model	
Details	

28.3 Waste Water Heat Recovery System

29.0 Hot Water Cylinder None

In Airing Cupboard	No

32.0 Photovoltaic Unit Multiple Dwellings – Connected

Export Capable Meter?	Yes
Connected To Dwelling	Yes
Diverter	No
Battery Capacity [kWh]	2.75

Summary for Input Data

PV Cells kWp	Orientation	Elevation	Overshading	FGHRS	MCS Certificate	Overshading Factor	MCS Certificate Reference	Panel Manufacturer
1.01	South	Horizontal	None Or Little		No	1.00		
0.18	South	Horizontal	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
		0	0

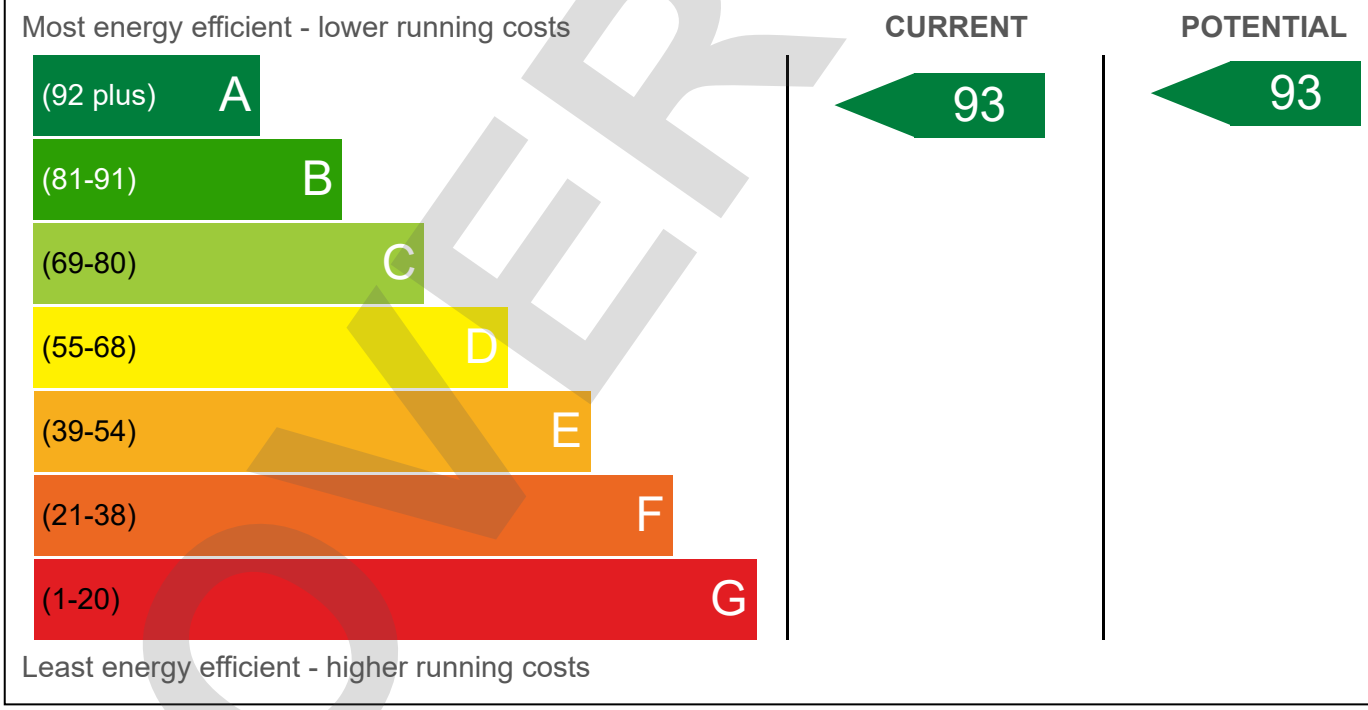
Overview Report

Dwelling Address	182-184, Bitterne Rd W, Southampton, Hampshire, SO18 1BH
Report Date	04/04/2024
Property Type	Flat, Detached
Floor Area [m^2]	42

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

Energy Rating

The current energy rating represents the overall energy efficiency of the dwelling. The potential energy rating is the overall energy rating of the dwelling after all of the recommend measures provided on the next page have been installed. A higher score represents a more energy efficient dwelling with lower fuel bills.



Overview 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 0.14 W/m²K	Very Good
Floor	Average thermal transmittance 0.12 W/m²K	Very Good
Windows	High performance glazing	Very Good
Main heating	Boiler and underfloor heating, mains gas	Good
Main heating controls	Room thermostat only	Average
Secondary heating	None	
Hot water	From main system	Very Good
Lighting	Excelent lighting efficiency	Very Good
Air tightness	Air permeability [AP50] = 3.0 m³/h.m² (assumed)	Good

Primary Energy use

The primary energy use for this property per year is 44 kilowatt hour (kWh) per square metre

Estimated CO_2 emissions of the dwelling

The estimated CO rating provides an indication of the dwelling's impact on the environment in terms of carbon dioxide emissions; the higher the rating the less impact it has on the environment.

The estimated CO emissions for this dwellings is: **0.4** per year

With the recommended measures the potential CO emissions could be: **0** per year

Overview Report

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 measure	Typical Yearly Saving	Potential Rating after measure installed	Cumulative savings (per year)	Cumulative Potential Rating

Estimated energy use and potential savings

Estimated energy cost for this property over a year

£120

Over a year you could save

£0

The estimated cost and savings show how much the average household would spend in this property for heating, lighting and hot water. It is not based on how energy is used by the people living at the property.

Contacting the assessor and the accreditation scheme

Assessor contact details	
Assessor name	Mr. Kieran Mckerr
Assessor's accreditation number	
Email Address	

Overview Report

Accreditation scheme contact details	
Accreditation scheme	
Telephone	
Email Address	

Assessment details	
Related party disclosure	
Date of assessment	04/04/2024
Date of certificate	04/04/2024
Type of assessment	SAP, new dwelling