

Summary for Input Data

Property Reference	New dwelling	Issued on Date	08/10/2025
Assessment Reference	00001	Prop Type Ref	
Property	95, Marland Fold, Rochdale, OL11 4RF		

SAP Rating	100 A	DER	0.32	TER	8.77
Environmental	100 A	% DER < TER			96.35
CO ₂ Emissions (t/year)	0.13	DFEE	43.62	TFEE	43.72
Compliance Check	See BREL	% DFEE < TFEE			0.23
% DPER < TPER	92.61	DPER	3.44	TPER	46.53

Assessor Details	Mr. Paul Byrne	Assessor ID	AU85-0001
Client	Triangle Architects Ltd, Barry Murphy		

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

Orientation	Southeast	
Property Tenture	ND	
Transaction Type	6	
Terrain Type	Suburban	
1.0 Property Type	House, Detached	
2.0 Number of Storeys	2	
3.0 Date Built	2025	
4.0 Sheltered Sides	2	
5.0 Sunlight/Shade	Average or unknown	
6.0 Thermal Mass Parameter	Precise calculation	
Thermal Mass	181.01	kJ/m²

7.0 Electricity Tariff	Standard
Smart electricity meter fitted	No
Smart gas meter fitted	No

7.0 Measurements				
	Ground floor:	Heat Loss Perimeter	Internal Floor Area	Average Storey Height
	1st Storey:	1.00 m	117.60 m²	2.40 m
		1.00 m	86.80 m²	3.00 m

8.0 Living Area	97.30	m²
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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	Cavity Wall	Cavity wall; plasterboard on dabs or battens, lightweight aggregate block, filled cavity, any outside structure	0.15	110.00	201.40	161.60	0.00	None	39.80	Enter Gross Area

Description	Construction	Kappa (kJ/m²K)	Area (m²)
Internal Wall (GF)	Dense block, plasterboard on dabs	75.00	75.40
Internal Wall (1F)	Plasterboard on timber frame	9.00	130.00

Description	Type	Construction	U-Value (W/m²K)	Kappa (kJ/m²K)	Gross Area(m²)	Nett Area (m²)	Shelter Code	Shelter Factor	Calculation Type	Openings
Pitched roof	External Slope Roof	Plasterboard, insulated slope	0.11	9.00	119.50	117.70	None	0.00	Enter Gross Area	1.80
Flat roof	External Flat Roof	Plasterboard, insulated flat roof	0.11	9.00	19.40	19.40	None	0.00	Enter Gross Area	0.00

Description	Storey	Construction	Area (m²)
Internal Ceiling	Lowest occupied	Plasterboard ceiling, carpeted chipboard floor	86.80

Description	Type	Storey Index	Construction	U-Value (W/m²K)	Shelter Code	Shelter Factor	Kappa (kJ/m²K)	Area (m²)
Ground floor	Ground Floor - Solid	Lowest occupied	Suspended concrete floor, carpeted	0.08	None	0.00	75.00	117.60

11.2 Internal Floors

Summary for Input Data

Description	Storey Index	Construction	Kappa (kJ/m²K)	Area (m²)
Internal Floor		Plasterboard ceiling, carpeted chipboard floor	18.00	86.80

12.0 Opening Types

Description	Data Source	Type	Glazing	Glazing Gap	Filling Type	G-value	Frame Type	Frame Factor	U Value (W/m²K)
Window	Manufacturer	Window	Double Low-E Soft 0.05			0.63		0.70	1.40
Solid door	Manufacturer	Solid Door				0.00			0.90
Roof light	Manufacturer	Roof Light	Double Low-E Soft 0.05			0.63		0.70	1.40

13.0 Openings

Name	Opening Type	Location	Orientation	Area (m²)	Pitch
Front	Solid door	External Wall	South East	2.40	
Front	Window	External Wall	South East	12.20	
Rear	Window	External Wall	North West	19.70	
Side	Window	External Wall	South West	4.10	
Side	Roof light	Pitched roof	South West	1.80	30
Side	Window	External Wall	North East	1.40	

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	22.60	0.30	0.30 Assumed	No
E3 Sill	Independently assessed	12.10	0.04	0.04 Assumed	No
E4 Jamb	Independently assessed	48.10	0.05	0.05 Assumed	No
E5 Ground floor (normal)	Independently assessed	46.70	0.16	0.16 Assumed	No
E6 Intermediate floor within a dwelling	Independently assessed	44.50	0.07	0.07 Assumed	No
E11 Eaves (insulation at rafter level)	Independently assessed	24.00	0.04	0.04 Assumed	No
E13 Gable (insulation at rafter level)	Independently assessed	21.00	0.04	0.04 Assumed	No
E14 Flat roof	Independently assessed	24.20	0.08	0.08 Assumed	No
E16 Corner (normal)	Independently assessed	30.30	0.09	0.09 Assumed	No
E17 Corner (inverted – internal area greater than external area)	Independently assessed	11.20	-0.09	-0.09 Assumed	No

Y-value

0.06 W/m²K

19.0 Mechanical Ventilation

Mechanical Ventilation

Mechanical Ventilation System Present	Yes
Approved Installation	No
Mechanical Ventilation data Type	Database
Type	Balanced mechanical ventilation with heat recovery
MV Reference Number	500793
Configuration	5
Manufacturer SFP	1.21
Duct Type	Rigid
MVHR Efficiency	86.00
Wet Rooms	5
SFP from Installer Commissioning Certificate	No
MVHR System Location	Inside heated envelope (installed exclusively)
Duct Installation Specification	Level 1

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	0
Number of passive vents	0

Summary for Input Data

Number of flueless gas fires	0				
21.0 Fixed Cooling System	No				
22.0 Pressure Testing	Yes				
Designed AP ₅₀	4.00	m ³ /(h.m ²) @ 50 Pa			
Test Method	Blower Door				
22.0 Lighting	No				
No Fixed Lighting	No				
	Name Lighting	Efficacy 80.00	Power 15.00	Capacity 1200.00	Count 25
24.0 Main Heating 1	Database				
Percentage of Heat	100.00				%
Database Ref. No.	107009				
Fuel Type	Electricity				
In Winter	266.75				
In Summer	167.34				
Model Name	AE080RXYDEG				
Manufacturer	Samsung Electronics Air Conditioner Europe B.V.				
System Type	Heat Pump				
Controls SAP Code	2207				
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				
25.0 Main Heating 2	None				
26.0 Heat Networks	None				
27.0 Secondary Heating	None				
28.0 Water Heating	Main Heating 1				
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				
Immersion Only Heating Hot Water	Yes				
28.1 Showers					
Description	Shower Type	Flow Rate [l/min]	Rated Power [kW]	Connected	Connected To
Ensuite	Combi boiler or unvented hot water system	8.00		No	
Shower Room	Combi boiler or unvented hot water system	8.00		No	
28.3 Waste Water Heat Recovery System					
29.0 Hot Water Cylinder	Hot Water Cylinder				
Cylinder Stat	Yes				

Summary for Input Data

Cylinder In Heated Space	Yes	
Independent Time Control	Yes	
Insulation Type	Measured Loss	
Cylinder Volume	250.00	L
Loss	1.80	kWh/day
Pipes insulation	Fully insulated primary pipework	
In Airing Cupboard	No	

31.0 Thermal Store

32.0 Photovoltaic Unit

Export Capable Meter?

Connected To Dwelling

Diverter

Battery Capacity [kWh]

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

34.0 Small-scale Hydro

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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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 100	A 100
		0	0
		0	0