

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	Z37221	Issued on Date	21/12/2022
Assessment Reference	Z37221.1	Prop Type Ref	Type 2
Property	4 Dob Brook Close, MANCHESTER, M40 1DB		
SAP Rating	84 B	DER	16.95
Environmental	87 B	TER	19.16
CO ₂ Emissions (t/year)	1.21	% DER<TER	11.52
General Requirements Compliance	Pass	DfEE	45.88
		TfEE	57.63
		% DfEE<TfEE	20.39
Assessor Details	Mr. Matthew Gibson, Energy Council, Tel: 01617621055, matthew.gibson@energycouncil.co.uk		Assessor ID
			H176-0001
Client			

SUMMARY FOR INPUT DATA FOR New Build (As Built)

Criterion 1 – Achieving the TER and TfEE rate

1a TER and DER

Fuel for main heating	Mains gas		
Fuel factor	1.00 (mains gas)		
Target Carbon Dioxide Emission Rate (TER)	19.16	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	16.95	kgCO ₂ /m ²	Pass
	-2.21 (-11.5%)	kgCO ₂ /m ²	

1b TfEE and DfEE

Target Fabric Energy Efficiency (TfEE)	57.63	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DfEE)	45.88	kWh/m ² /yr	
	-11.7 (-20.3%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.19 (max. 0.30)	0.19 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Floor	0.15 (max. 0.25)	0.15 (max. 0.70)	Pass
Roof	0.09 (max. 0.20)	0.09 (max. 0.35)	Pass
Openings	1.32 (max. 2.00)	1.34 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated from linear thermal transmittances for each junction

3 Air permeability

Air permeability at 50 pascals	4.81 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

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Main heating system

Boiler system with radiators or underfloor - Mains gas
Data from database
Vaillant ecoTEC sustain 28 VUW 286/7-2 (H-GB)
Combi boiler
Efficiency: 89.1% SEDBUK2009
Minimum: 88.0%

Pass

Secondary heating system

None

5 Cylinder insulation

Hot water storage

No cylinder

6 Controls

Space heating controls

Programmer, room thermostat and TRVs

Pass

Hot water controls

No cylinder

Boiler interlock

Yes

Pass

7 Low energy lights

Percentage of fixed lights with low-energy fittings

100 %

Minimum

75 %

Pass

8 Mechanical ventilation

Continuous extract system (decentralised)

Specific fan power

0.1600 0.1200

Maximum

0.7

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (West Pennines (England))

Not significant

Pass

Based on:

Overshading

Average

Windows facing North

6.47 m², No overhang

Windows facing East

9.24 m², No overhang

Windows facing South

3.94 m², No overhang

Air change rate

4.00 ach

Blinds/curtains

None

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type

U-value

Filled Cavity with Edge Sealing

0.00

W/m²K

Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals

4.81 (measured in this dwelling)

Maximum

10.0

Pass

10 Key features

Party wall U-value

0.00

W/m²K

Roof U-value

0.09

W/m²K

Roof U-value

0.09

W/m²K

Door U-value

1.10

W/m²K

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This report has not been submitted through the Elmhurst Energy members' portal, therefore results are subject to change when the dwelling is completed.