

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Designed)

Property Reference	Ground Floor Flat 1	Issued on Date	22/03/2020
Assessment Reference	Ground Floor Flat1	Prop Type Ref	GF Flat 1
Property			

SAP Rating	81 B	DER	22.15	TER	22.23
Environmental	85 B	% DER<TER	0.34		
CO₂ Emissions (t/year)	1.02	DFEE	50.32	TFEE	62.06
General Requirements Compliance	Pass	% DFEE<TFEE	18.92		

Assessor Details	Miss Cristina Aloisio	Assessor ID	00
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Client	
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SUMMARY FOR INPUT DATA FOR New Build (As Designed)

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)	22.23	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	22.15	kgCO ₂ /m ²	Pass
	-0.08 (-0.4%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	62.06	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	50.32	kWh/m ² /yr	
	-11.8 (-19.0%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.12 (max. 0.30)	0.12 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Floor	0.10 (max. 0.25)	0.10 (max. 0.70)	Pass
Openings	1.13 (max. 2.00)	2.00 (max. 3.30)	Pass

2a Thermal bridging

Thermal bridging calculated using user-specified γ -value of 0.080

3 Air permeability

Air permeability at 50 pascals	3.92 (design value)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Boiler system with radiators or underfloor - Mains gas Data from manufacturer Worcester -- Combi boiler Efficiency: 94.0% SEDBUK2009 Minimum: 88.0%	Pass
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Secondary heating system

None

5 Cylinder insulation

Hot water storage

No cylinder

6 Controls

Space heating controls

Time and temperature zone control

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

Specific fan power

0.70

Maximum

0.7

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Thames Valley)

Not significant

Pass

Based on:

Overshading

Average

Windows facing North

6.70 m², No overhang

Windows facing South

1.89 m², No overhang

Windows facing West

3.78 m², No overhang

Air change rate

6.00 ach

Blinds/curtains

Light-coloured venetian blind, closed 100% of daylight hours

Criterion 4 – Building performance consistent with DER and DFEE rate

Party Walls

Type

U-value

Solid Wall

0.00

W/m²K

Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals

3.92 (design value)

Maximum

10.0

Pass

10 Key features

External wall U-value

0.12

W/m²K

External wall U-value

0.12

W/m²K

External wall U-value

0.12

W/m²K

External wall U-value

0.12

W/m²K

Party wall U-value

0.00

W/m²K

Floor U-value

0.10

W/m²K

Window U-value

1.00

W/m²K

Air permeability

3.9

m³/m²h

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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.