

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	HIGH-STON-2024-05			Issued on Date	18/06/2021
Assessment Reference	ABF & EPC	Prop Type Ref	FF		
Property	5 Whieldon Way, North Stoneham Park, Eastleigh, SO50 9SB				
SAP Rating	85 B	DER	11.67	TER	15.33
Environmental	92 A	% DER<TER	23.86		
CO ₂ Emissions (t/year)	0.62	DFEE	28.50	TFEE	32.91
General Requirements Compliance	Pass	% DFEE<TFEE	13.39		
Assessor Details	Mr. Malcolm Maclean, SRE Limited, Tel: 01730 710044, malcolm@sre.co.uk			Assessor ID	V497-0002
Client	Highwood Construction Ltd, HIGH				

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)	15.33	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	11.67	kgCO ₂ /m ²	Pass
	-3.66 (-23.9%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	32.91	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	28.50	kWh/m ² /yr	
	-4.4 (-13.4%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.21 (max. 0.30)	0.21 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Floor	0.20 (max. 0.25)	0.20 (max. 0.70)	Pass
Openings	1.20 (max. 2.00)	1.20 (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	3.90 (measured in this dwelling)	
Maximum	10.0	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Boiler system with radiators or underfloor - Mains gas Data from database Baxi 200 224 COMBI Combi boiler Efficiency: 89.0% SEDBUK2009 Minimum: 88.0%	Pass
Secondary heating system	None	

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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 supply and extract system

Specific fan power

0.70

Maximum

1.5

Pass

MVHR efficiency

91

%

Minimum

70

%

Pass

Criterion 3 – Limiting the effects of heat gains in summer

9 Summertime temperature

Overheating risk (Southern England)

Slight

Pass

Based on:

Overshading

Average

Windows facing South

10.86 m², No overhang

Windows facing West

7.85 m², No overhang

Air change rate

3.00 ach

Blinds/curtains

Light-coloured curtain or roller blind, closed 100% of daylight hours

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

3.90 (measured in this dwelling)

Maximum

10.0

Pass

10 Key features

Party wall U-value

0.00

W/m²K

Air permeability

3.9

m³/m²h

Photovoltaic array

0.49

kW

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