

BASIC COMPLIANCE REPORT

Calculation Type: New Build (As Built)

Property Reference	HIGH-STON-2024-01	Issued on Date	18/06/2021
Assessment Reference	ABF & EPC	Prop Type Ref	GF
Property	1 Whieldon Way, North Stoneham Park, Eastleigh, SO50 9SB		

SAP Rating	83 B	DER	14.67	TER	18.44
Environmental	90 B	% DER<TER	20.46		
CO ₂ Emissions (t/year)	0.72	DFEE	41.95	TFEE	47.50
General Requirements Compliance	Pass	% DFEE<TFEE	11.70		

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)	18.44	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	14.67	kgCO ₂ /m ²	Pass
	-3.77 (-20.4%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	47.50	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	41.95	kWh/m ² /yr	
	-5.6 (-11.8%)	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	0.13 (max. 0.25)	0.13 (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	3.72 (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	
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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 m ² , No overhang	
Windows facing West	7.85 m ² , 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/m ² K	Pass

Air permeability and pressure testing

3 Air permeability

Air permeability at 50 pascals	3.72 (measured in this dwelling)	
Maximum	10.0	Pass

10 Key features

Party wall U-value	0.00	W/m ² K
Air permeability	3.7	m ³ /m ² h
Photovoltaic array	0.47	kW

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