PREDICTED ENERGY ASSESSMENT



ROS, Plot 47, Sweet Hill,

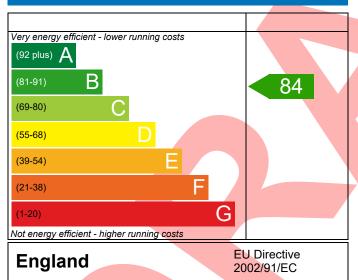
Southwell, Portland, Dorset, DT5 Dwelling type: House, Semi-Detached

Date of assessment: 13/03/2023
Produced by: Resi Resolve
Total floor area: 102.93 m²

This document is a Predicted Energy Assessment for properties marketed when they are incomplete. It includes a predicted energy rating which might not represent the final energy rating of the property on completion. Once the property is completed, this rating will be updated and an official Energy Performance Certificate will be created for the property. This will include more detailed information about the energy performance of the completed property.

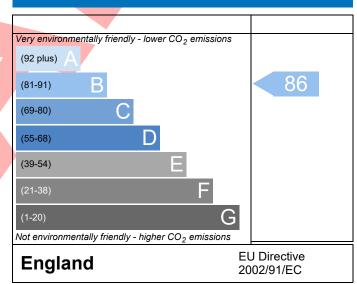
The energy performance has been assessed using the Government approved SAP2012 methodology and is rated in terms of the energy use per square meter of floor area; the energy efficiency is based on fuel costs and the environmental impact is based on carbon dioxide (CO₂) emissions.

Energy Efficiency Rating



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.

Environmental Impact (CO₂) Rating



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO₂) emissions. The higher the rating the less impact it has on the environment.

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



BUILDING REGULATION COMPLIANCE Calculation Type: New Build (As Designed)



Property Reference		/				Issued on Date	13/03/202	
Assessment Reference	001 Prop Type Ref ROS							
Property	ROS, Plot 47, Swe	eet Hill, Sout	thwell, Por	tland, Dorset, DT	T5			
SAP Rating			84 B	DER	16.66	TER	27.12	
Environmental			86 B	% DER <ter< td=""><td></td><td>38.58</td><td></td></ter<>		38.58		
CO ₂ Emissions (t/year)			1.39	DFEE	48.91	TFEE	59.58	
General Requireme	nts Compliance		Pass	% DFEE <tfee< td=""><td></td><td>17.92</td><td></td></tfee<>		17.92		
Assessor Details	Mrs. Georgina O'Con	nor, Resi Re	solve, Tel:	0774877804 <mark>7</mark> , g	eorgie@resi-	Assessor ID	T293-000	
	resolve.co.uk							
Client	Koori Limited, KOO							
UMARY FOR INPUT	DATA FOR New Build	d (As Design	ed)					
riterion 1 – Achievi	ng the TER and TFEE	rate						
a TER and DER								
Fuel for main heating			Electricit	У				
Fuel factor			1.55 (ele	ctricity)				
Target Carbon Dioxide Emission Rate (TER)			27.12 kgCO ₂					
Dwelling Carbon Dioxide Emission Rate (DER)			16.66			kgCO ₂ /m ²	Pass	
			-10.46 (-	38.6%)		kgCO ₂ /m ²		
b TFEE and DFEE								
Target Fabric Energy Efficiency (TFEE)			59.58			kWh/m²/yr		
Dwelling Fabric Energy Efficiency (DFEE)		Ξ)	48.91			kWh/m²/yr		
			-10.7 (-1	8.0%)		kWh/m²/yr	Pass	
riterion 2 – Limits o	on design flexibility							
Limiting Fabric St	andards							
2 Fabric U-values								
Element		Average		ı	Highest			
External w	<i>r</i> all	0.21 (ma	ix. 0.30)	(0.21 (max. 0.7	0)	Pass	
Party wall		0.00 (ma			-		Pass	
Floor		0.11 (max. 0.25)		(0.11 (max. 0.7	0)	Pass	
Roof		0.12 (ma			,	18 (max. 0.35)		
Openings		1.28 (ma	x. 2.00)	-	1.30 (max. 3.3	Pass		
2a Thermal bridg	ing							
Thermal bridg	ging calculated from li	near therma	ıl transmitt	ances for each ju	unction			
3 Air permeabilit	У							
Air permeability at 50 pascals			4.50 (design value) m ³ /(h.m ²) @ 50 Pa				a	
Air permeabil	,							

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4 Heating efficiency

BUILDING REGULATION COMPLIANCE Calculation Type: New Build (As Designed)



Main heating system	Heat pump with radiators or underfloor - Electric Vaillant aroTHERM 5kW VWL 55/3 A 230v	
Secondary heating system	None	
5 Cylinder insulation		
Hot water storage	Measured cylinder loss: 1.42 kWh/day Permitted by DBSCG 2.30	Pass
Primary pipework insulated	Yes	Pass
<u>6 Controls</u>		
Space heating controls	Time and temperature zone control	Pass
Hot water controls	Cylinderstat	Pass
	Independent timer for DHW	Pass
7 Low energy lights		
Percentage of fixed lights with low-energy fittings	100 %	
Minimum	75 %	Pass
8 Mechanical ventilation		
Not applicable		
Criterion 3 – Limiting the effects of heat gains in sur	mmer	
9 Summertime temperature		
Overheating risk (Southern England)	Not significant	Pass
Based on:		
Overshading	Average	
Windows facing South East	8.86 m ² , No overhang	
Windows facing North West	6.17 m², No overhang	
Air change rate	8.00 ach	
Blinds/curtains	None	
Criterion 4 – Building performance consistent with	DER and DFEE rate	
Party Walls		
Туре	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	4.50 (design value) m ³ /(h.m ²) @ 50 Pa	
Maximum	10.0 m³/(h.m²) @ 50 Pa	Pass
10 Key features		
Party wall U-value	0.00 W/m ² K	
Roof U-value	0.10 W/m²K	
Floor U-value	0.11 W/m²K	
Door U-value	1.10 W/m²K	
Door U-value	1.00 W/m²K	

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Regs Region: England Elmhurst Energy Systems SAP2012 Calculator (Design System) version 4.14r19

RECOMMENDATIONS



	Typical cost	Typical savings per year	Energy efficiency	Environmental impact	Result
Low energy lights			0	0	Already installed
Solar water heating	£4,000 - £6,000	£205	B 87	B 88	Recommended
Photovoltaic	£3,500 - £5,500	£779	A 96	A 96	Recommended
Wind turbine			0	0	Not applicable
Totals	£7,500 - £11,500	£984	A 96	A 96	



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