PREDICTED ENERGY ASSESSMENT



Plot 10, Marroway Lane, Witchford, Cambridgeshire, CB6 2HU Dwelling type: House, Semi-Detached

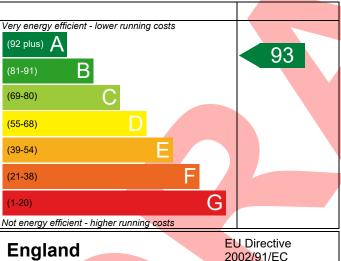
Date of assessment: 11/11/2022 Produced by: Jacob Marchant

Total floor area: 75.36 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.

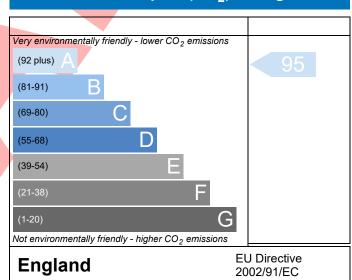
The energy performance has been assessed using the Government approved SAP2012 methodology and is rated in terms of the energy use per square meter of floor area; the energy efficiency is based on fuel costs and the environmental impact is based on carbon dioxide (CO₂) emissions.

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.

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



Property Reference CB6 2HU Plot 10)			Issued on Date	11/11/2022
Assessment 001		Pro	p Type Ref	Туре А	
Reference					
Property Plot 10, Marrow	ay Lane, Witchford, Cam	bridgeshire, CB6 2	2HU		
SAP Rating	93 A	DER	7.68	TER	18.74
Environmental	95 A	% DER <ter< td=""><td></td><td>59.02</td><td></td></ter<>		59.02	
CO₂ Emissions (t/year)	0.35	DFEE	44.70	TFEE	51.82
General Requirements Compliance	Pass	% DFEE <tfee< td=""><td></td><td>13.73</td><td></td></tfee<>		13.73	
Assessor Details Mr. Jake Eaton, Jake	e Eaton, Tel: 0140028347	1, jake@aeratech	.co.uk	Assessor ID	T253-0001
Client					
SUMARY FOR INPUT DATA FOR New Bui	ld (As Designed)				
Criterion 1 – Achieving the TER and TFEE	rate				
1a TER and DER					
Fuel for main heating	Mains gas				
Fuel factor	1.00 (mai				
Target Carbon Dioxide Emission Rate				kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rat	re (DER) 7.68			kgCO ₂ /m ²	Pass
	-11.06 (-5	9.0%)		kgCO ₂ /m ²	
1b TFEE and DFEE					
Target Fabric Energy Efficiency (TFEE)	51.82			kWh/m²/yr	
Dwelling Fabric Energy Efficiency (DFE				kWh/m²/yr	
	-7.1 (-13.7	7%)		kWh/m²/yr	Pass
Criterion 2 – Limits on design flexibility		_			
Limiting Fabric Standards					
2 Fabric U-values					
Element	Average		hest		
External wall	0.23 (max. 0.30)	0.2	3 (max. 0.70	0)	Pass
Party wall	0.00 (max. 0.20)	-			Pass
Floor	0.13 (max. 0.25)		3 (max. 0.70	•	Pass
Roof	0.13 (max. 0.20)		0.13 (max. 0.35)		Pass
Openings	1.37 (max. 2.00)	1.4	0 (max. 3.30))	Pass
2a Thermal bridging					
Thermal bridging calculated from l	linear thermal transmitta	inces for each juni	ction		
3 Air permeability				2.44	
Air permeability at 50 pascals	5.01 (desi	gn value)		m ³ /(h.m ²) @ 50 P	
Maximum	10.0			m ³ /(h.m ²) @ 50 P	a Pass
Limiting System Efficiencies					

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4 Heating efficiency

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



Efficiency: 89.6% SEDBUX2009 Minimum: 88.0% Secondary heating system None S-Cylinder Insulation Hot water storage No cylinder Space heating controls Hot water controls Boiler interlock Personance of fixed lights with low-energy fittings Minimum Percentage of fixed lights with low-energy fittings Minimum S-Sepecific fan power Maximum Do-Z Continuous extract system (decentralised) Specific fan power Maximum Do-Z Criterion 3 – Limiting the effects of heat gains in summer 9 Summertime temperature Overheating risk (East Anglia) Based on: Overshading Windows facing North Windows facing Bast Windows	Main heating system	Boiler system with radiators or underfloor - Mains gas Data from database Ideal LOGIC COMBI ESP1 24 Combi boiler		
Secondary heating system None SOlvinder insulation Hot water storage Sociontos Space heating controls Space heating controls No cylinder Solier interlock Pergrammer, room thermostat and TRVS Pass No cylinder Ves Pass No cylinder Pass No cylinder Ves Pass Pass Town energy lights Percentage of fixed lights with low-energy fittings Minimum Tos Minimum Minimum Tos Minimum		Efficiency: 89.6% SEDBUK2009 Minimum: 88.0%		
Hot water storage No cylinder 6 Controls Space heating controls Programmer, room thermostat and TRVs Pass Hot water controls No cylinder	Secondary heating system			
Space heating controls Hot water controls Boiler interlock Pes Porgrammer, room thermostat and TRVs Pass Pass Porgrammer, room thermostat and TRVs Pass Pass Percentage of fixed lights with low-energy fittings Minimum Porgrammer Minimum Mortinuous extract system (decentralised) Specific fan power Maximum Minimum Minim	5 Cylinder insulation			
Space heating controls Hot water controls Boiler interlock Yes Pass **Tube energy lights Percentage of fixed lights with low-energy fittings Minimum Tos **Section 3 - Limiting the effects of heat gains in summer **Summertime temperature Overshading Windows facing Rorth Windows facing Rorth Windows facing Rost Windows facing Rost Air change rate Bilinds/curtains **Limiting the effects of heat gains in summer **Summertime temperature Overshading Windows facing East Windows facing East Air change rate Bilinds/curtains **Limiting the effects of heat gains in summer **Summertime temperature Overshading Windows facing Rorth O.71 m², No overhang Windows facing East Air overhang Windows facing West Air change rate Bilinds/curtains Light-coloured curtain or roller blind, closed 0% of daylight hours **Criterion 4 - Building performance consistent with DER and DFEE rate **Party Walls Type U-value **Factor Party Walls Type U-value **Factor Son Pass **Air permeability and pressure testing 3 Air permeability Air permeability at 50 pascals Maximum **Double Tool Wym²k **Double Tool Wym²k **Pass **Double Tool Wym²k	Hot water storage	No cylinder		
Hot water controls Boiler interlock Yes Pass 7 Low energy lights Percentage of fixed lights with low-energy fittings Minimum Percentage of fixed lights with low-energy fittings Minimum Min	<u>6 Controls</u>			
Boiler interlock Yes Pass 7 Low energy lights Percentage of fixed lights with low-energy fittings Minimum 75 % Pass 8 Mechanical ventilation Continuous extract system (decentralised) Specific fan power 0.1100 0.1400 Maximum 0.7 Pass Criterion 3 – Limiting the effects of heat gains in summer 9 Summertime temperature Overheating risk (East Anglia) Not significant Pass Based on: Overshading Average Windows facing North 0.71 No overhang Windows facing Rosth 3.47 m², No overhang Windows facing West 6.38 m², No overhang Air change rate Blinds/curtains Light-coloured curtain or roller blind, closed 0% 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 and pressure testing 1 Air permeability at 50 pascals 5.01 (design value) m²/(h.m²) @ 50 Pa Pass 10 Key features Party wall U-value For the finance of the design value of the pass of the pas	Space heating controls	Programmer, room thermostat and TRVs	Pass	
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Light-coloured curtain or roller blind, closed 0% 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 Maximum 10.0 Maximum 10.0 W/m²K Pass 10 Key features Party wall U-value 0.00 W/m²K]	
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Party wall U-value 0.00 W/m²K	Maximum	10.0 m³/(h.m²) @ 50 Pa	Pass	
	10 Key features			
Photovoltaic array 2.05 kW	Party wall U-value	0.00 W/m ² K		
	Photovoltaic array	2.05 kW		

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