

PREDICTED ENERGY ASSESSMENT

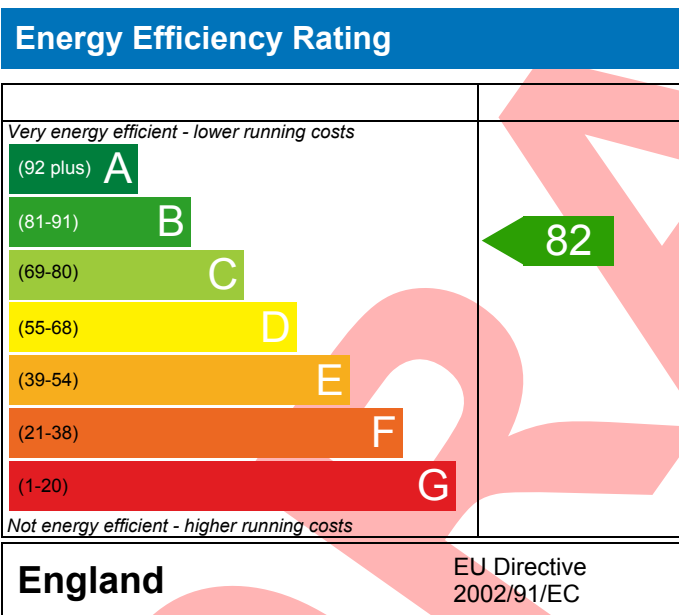


16, Matford Home Park,
Exeter,
Devon,
EX1

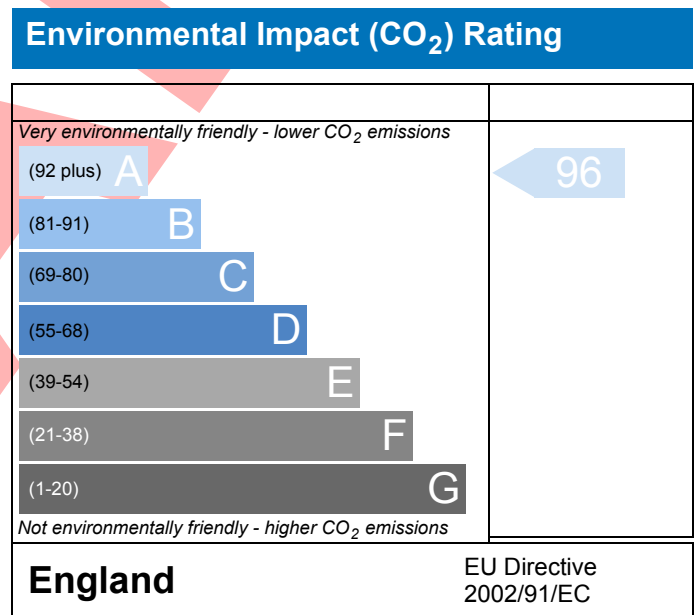
Dwelling type: Flat, Semi-Detached
Date of assessment: 03/10/2020
Produced by: Stuart Milne
Total floor area: 70.53 m²

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.



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.



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	Matford 016	Issued on Date	03/10/2020
Assessment Reference	1	Prop Type Ref	Block B GFF
Property	16, Matford Home Park, Exeter, Devon, EX1		

SAP Rating	82 B	DER	5.96	TER	18.02
Environmental	96 A	% DER<TER	66.93		
CO ₂ Emissions (t/year)	0.36	DFEE	40.33	TFEE	47.24
General Requirements Compliance	Pass	% DFEE<TFEE	14.62		

Assessor Details	Mr. Stuart Milne, Stuart Milne, Tel: 01934 742386, sap@mendipenergy.com	Assessor ID	L721-0001
Client	Cavanna Homes		

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	Biomass (c)		
Fuel factor	1.00 (biomass)		
Target Carbon Dioxide Emission Rate (TER)	18.02	kgCO ₂ /m ²	
Dwelling Carbon Dioxide Emission Rate (DER)	5.96	kgCO ₂ /m ²	Pass
	-12.06 (-66.9%)	kgCO ₂ /m ²	

1b TFEE and DFEE

Target Fabric Energy Efficiency (TFEE)	47.24	kWh/m ² /yr	
Dwelling Fabric Energy Efficiency (DFEE)	40.33	kWh/m ² /yr	
	-6.9 (-14.6%)	kWh/m ² /yr	Pass

Criterion 2 – Limits on design flexibility

Limiting Fabric Standards

2 Fabric U-values

Element	Average	Highest	
External wall	0.25 (max. 0.30)	0.25 (max. 0.70)	Pass
Party wall	0.00 (max. 0.20)	-	Pass
Floor	0.11 (max. 0.25)	0.11 (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	7.00 (design value)	m ³ /(h.m ²) @ 50 Pa	
Maximum	10.0	m ³ /(h.m ²) @ 50 Pa	Pass

Limiting System Efficiencies

4 Heating efficiency

Main heating system	Community heating scheme	-
Secondary heating system	None	

5 Cylinder insulation

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Hot water storage

No cylinder

6 Controls

Space heating controls

Flat rate charging, programmer and TRVs

Pass

Hot water controls

No cylinder

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 summer

9 Summertime temperature

Overheating risk (South West England)

Slight

Pass

Based on:

Overshading

Average

Windows facing East

1.93 m², No overhang

Windows facing West

6.16 m², No overhang

Air change rate

0.00 ach

Blinds/curtains

None

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

7.00 (design value)

m³/(h.m²) @ 50 Pa

Maximum

10.0

m³/(h.m²) @ 50 Pa

Pass

10 Key features

Party wall U-value

0.00

W/m²K

Floor U-value

0.11

W/m²K

Thermal bridging γ -value

0.035

W/m²K

Community heating, Biomass

N/A

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RECOMMENDATIONS



	Typical cost	Typical savings per year	Energy efficiency	Environmenta l impact	Result
Low energy lights			0	0	Already installed
Solar water heating			0	0	Not applicable
Photovoltaic			0	0	Not applicable
Wind turbine			0	0	Not applicable
Totals	£0	£0	B 82	A 96	

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