RE1 Energy Statement

for 8 Lewis Close Risinghurst OX3 8JD





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<u>A</u><u>Introduction</u>

It is planned to build 1 No detached property at the above address. In accordance with the Oxford Local Plan 2036 Planning Policy RE1, an energy statement is required to accompany the planning application, this report is to satisfy this request

<u>B</u> <u>Methodology</u>

This report has been prepared to address the following: -

- Provide evidence that the proposed development achieves a 40% reduction in CO2 emissions over a 2013 Building Regulation compliant property
- Provide evidence that 25% of energy used is via on-site renewable energy devices and other low carbon technologies
- Provide evidence how the policy will be complied with and monitored

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<u>C</u> <u>Energy Statement</u>

<u>1.0</u> Energy Efficiency

The orientation, planned layout and elevation treatments of the proposed dwellings is as shown on the accompanying Plans and Elevations as prepared by the client's agent. This development is for 1 No detached property and it is proposed to construct this building using traditional cavity construction with Concrete Block Association thermal detailing to help minimise the need for space heating.

The table below shows the targets being aimed for. Both U-Values and pressure test are well in excess of the minimum regulatory standards required.

Table 1 Energy Efficiency Design Measures

Design Elements	Comparison of Dwelling Construction with Minimum Regulatory Standards		
	8 Lewis Close	L1A Building Regulations Limits	
Wall U-Values	0.18	0.30	
Floor U-Values	0.11	0.25	
Roof U-Value	0.15	0.20	
Windows/Doors U-Values	1.40/1.20	1.60	
Rooflights U values	1.50	2.20	
Low energy lighting	100%	100%	
Space Heating	ASHP to underfloor	N/A	
Heating Controls	Time & Temperature	Time & Temperature Zone	
	Zone Control	Control	
Thermal Bridging	Concrete Block	Not compulsory	
	Association Enhanced	requirement	
	Thermal Details		
Air Tightness	5	8	

All appliances installed into the dwelling will be A+-B rated to ensure they are both energy & water efficient.

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2.0 Renewable Energy

It is planned to install a ASHP for heating and hot water generation.

Enclosed with this report are Initial Design SAP Calculations that contain all the proposed design features noted in this report, ie, enhanced U Values, Thermal Details, Design Air Tightness of 5. This SAP rating show an uplift in DER over TER by 51.67%

This SAP support the fact that this design, if constructed as proposed, exceeded the required 40% uplift in CO2 emissions as required by planning policy RE1

The proposed ASHP will provide 100% of energy required to run the heating and hot water property. In addition, it is proposed to fit 3.5 KWP of PV on the South Elevation

D Summary

We have demonstrated in this report and attached Design SAP reports that the property as proposed could be constructed to comply with Planning Policy RE1.

If Planning Permission was granted it is proposed for this to be monitored by the production of the As Built SAP reports on completion. If required, this report can be made available to the Planning Department as confirmation of compliance with the RE1 planning policy

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