



BREEAM EcoHomes Report

44 Bedford Row Pre-assessment

DRAFT

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1 Introduction

This BREEAM EcoHomes Pre-assessment has been prepared by *Future Energy Surveys Ltd* on behalf of *Claridge Architects* and *Westrock Limited* for the proposed development at 44 Bedford Road, London. The development will see the creation of 19 dwellings as a result of a material change of use of an existing dwelling.

The report will consider and assess the commitments made by the design team to achieve BREEAM EcoHomes “Very Good”.

1.1 Assessor Declaration

I, Gerard McGuigan have complied this report to the best of my ability and have based all findings on the information that is referenced within this report. To the best of my knowledge all the information contained within this report is correct and accurate.

Signed



Gerard McGuigan

Future Energy Surveys Ltd



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2 EcoHomes Assessment

The BREEAM EcoHomes assessment methodology assesses a development against eight categories, many of which compliment national and local planning policies such as PPS9 – Biodiversity and Geological Conservation, PPS10 – Planning for Sustainable Waste Management, PPS22 – Renewable Energy and PPS25 – Development and Flood Risk. The nine categories assessed are:

- Energy and Carbon Dioxide Emissions
- Transport
- Pollution
- Materials
- Water
- Land Use and Ecology
- Health and Wellbeing
- Management

To achieve an EcoHomes “Very Good” rating a development must achieve a point score of 58 or more.

2.1 Assessor Notes

The findings and conclusions of this report are based on the drawings provided by *Claridge Architects*.

It is understood that Camden Council requires all EcoHomes assessments to achieve a minimum of 60% of all available credits in the Energy and Water categories and a 40% score in the Materials category.

2.2 EcoHomes Commitments

ENE 1 – Dwelling Emission Rates.....15 Credits

Initial SAP calculations confirm that an average DER of 26kg/m²/yr is likely. Six credits can be awarded.

ENE 2 – Building Fabric.....2 Credits

Initial SAP calculations confirm that an average HLP of less than 1.75 is achievable. Two credits can be awarded.

ENE 3 – Drying Space.....1 Credit

An extendable washing line will be installed in the bathroom of each flat. One credit can be awarded.

ENE 4 – EcoLabelled Goods.....2 Credits

The following white good will be provided to each dwelling.

- A+ rated fridge/freezer,
- A rated dishwasher and washing machine,
- B rated tumble dryer (if installed).

Two credits can be awarded.

ENE 5 – Internal Lighting.....2 Credits

75% of all internal light fittings will be dedicated energy efficient – only accepting lamps with a luminous efficacy of 40 lumens per circuit watt. Two credits can be awarded.

ENE 6 – External Lighting.....2 Credits

All internal communal lighting will be dedicated energy efficient with motion controls. Any external lighting will be dedicated energy efficient with motion and daylight controls. Two credits can be awarded.

Tra 1 – Public Transport.....2 Credits

The development is within 500m of a transport node providing a service to a local centre at frequent intervals. Two credits can be awarded.

Tra 2 – Cycle Storage.....2 Credits

The proposed cycle store is too small to qualify for credits.

Tra 3 – Local Amenities.....3 Credits

Initial studies confirm that the development satisfies the following criteria;

- The building is within 500m of a post box and food store.
- The building is within 1000m of 5 of the following amenities; bank, pharmacy, primary school, medical centre, leisure centre, community centre, place of worship, public house & public area.
- There are safe pedestrian routes to all local amenities.

Three credits can be awarded.

Tra 4 – Home Office.....1 Credit

Each dwelling will be provided with the facilities for a room to operate as a home office. One credit can be awarded.

POL 1 – Insulant GWP.....1 Credit

All insulating materials specified for the following elements must achieve a GWP of 5 or less;

- Roof
- Wall – internal & external
- Floor
- Cylinder and pipework.

One credit can be awarded.

POL 2 – NO_x Emissions.....3 Credits

Gas condensing boilers with confirmed NO_x emissions of 40mg/kWh will be installed. Three credits can be awarded.

POL3 – Reduction of Surface Runoff.....2 Credits

Without the installation of rainwater harvesting equipment or rainwater attenuation systems it is unlikely that the development will score any credits in this category. As such no credits have been awarded in the pre-assessment.

POL 4 – Renewable & Low Emission Energy Source.....3 Credits

Following on from the conclusions of the Energy Report, should the key recommendations be implemented and an element of renewable technology included within the buildings energy services, then one credit can be awarded.

POL 2 – Flood Risk.....2 Credits

The development is in zone 1. Two credits can be awarded at the pre-assessment stage.

MAT 1 Environmental Impact of Elements.....16 Credits

An initial MAT 1 assessment confirms that 8 credits are achievable.

MAT 2 & 3 – Responsible Sourcing of Materials.....9 Credits

Given the nature of the development it is unlikely that significant credits are available in this category. This can be reviewed at the detailed design stage. As such 0 credits can be awarded.

MAT 4 – Recycling Facilities.....6 Credits

It is understood that Camden Council operates a recyclable waste collection system. To qualify for 6 credits each dwelling must be provided with dedicated internal recycling facilities – 3 x 10 litre bins. Six credits can be awarded.

WAT 1 – Internal Potable Water Use.....5 Credits

Camden Council requires an internal water consumption of 37m³/bedspace/year to achieve the mandatory 60% water score. As such four credits can be awarded.

WAT 2 – External Potable Water Use.....1 Credit

No communal space is available. As such one credit can be awarded by default.

ECO 1 – Ecological Value of Site.....1 Credit

The development satisfies the requirements of Checklist Eco 1. One credit can be awarded.

ECO 2 – Ecological Enhancement.....1 Credit

An ecologist will not be employed.

ECO 3 – Protection of Ecological Features.....1 Credit

One credit can be awarded by default.

ECO 4 – Change of Ecological Value of Site.....4 Credits

A neutral enhancement is achieved by default. Two credits can be awarded.

ECO 5 – Building Footprint.....2 Credits

The total combined floor area to footprint area ratio is greater than 3.5:1. Two credits can be awarded.

HEA 1 Daylighting.....3 Credits

It is unlikely that credits will be awarded. This can be reviewed at the detailed design stage.

HEA 2 Sound Insulation.....4 Credits

The development must satisfy the requirements of Approved Document E. Should the developer commit themselves to a schedule of sound tests compliant with column A of Table 2 of the technical guidance then 1 credit can be awarded.

HEA 3 – Private Space.....1 Credit

This credit cannot be awarded.

MAN 1 – Home User Guide.....3 Credits

It is recommended that a home user guide is supplied to each dwelling. This should detail all the key sustainability features incorporated into the development and details on the locality. Three credits can be awarded.

MAN 2 – Considerate Constructors.....2 Credits

At the pre-assessment stage this credit remains unclear.

MAN 3 – Construction Site Impacts.....3 Credits

It is recommended that 4 of the following 6 activities are monitored;

- Energy consumption arising from site activities.
- Energy arising from transport to and from site.
- Water consumption arising from site activities.
- Adopt best practice policies with respect to air pollution.
- Adopt best practice policies with respect to water pollution.
- Ensure 80% of site timber is responsibly sourced, reused or recycled.

In addition, monitor site waste. Three credits can be awarded.

MAN 4 – Security.....2 Credits

It is recommended that Secured by Design is achieved. In addition to this standard windows and doors must achieve the standard specified in the technical guidance. Two credit can be awarded.

2.3 Summary Score

The tables below details the point scores thought achievable for the three assessed properties

	Credits Awarded	Weighing Factor	Points
Energy		0.22	13.75
ENE 1 - Dwelling Emission Rate	6		
ENE 2 – Building Fabric	2		
ENE 3 – Drying Space	1		
ENE 4 – EcoLabelled White Goods	2		
ENE 5 – Internal Lighting	2		
ENE 6 – External Lighting	2		
Transport		0.08	6.00
TRA 1 – Public Transport	2		
TRA 2 – Cycle Storage	0		
TRA 3 – Local Amenities	3		
TRA 4 – Home Office	1		
Pollution		0.	6.36
POL 1 – GWP of Insulants	1		
POL 2 – NO _x Emissions	3		
POL 3 – Reduction of Surface Run-Off	0		
POL 4 – Renewables	1		
POL 5 – Flood Risk	2		
Materials		0.14	6.32
MAT 1 – Environmental Impact of Materials	8		
MAT 2 – Responsible Sourcing of Materials	0		
MAT 3 – Responsible Sourcing of Materials	0		
MAT 4 – Recycling Materials	6		
Water		0.10	8.33
WAT 1 – Internal Potable Water	4		
WAT 2 – External Potable Water	1		
Land Use and Ecology		0.12	8.00
ECO 1 – Ecological Value of Site	1		
ECO 2 – Ecological Enhancement	0		
ECO 3 – Protection of Ecological Features	1		
ECO 4 – Change in Ecological Value of Site	2		
ECO 5 – Building Footprint	2		
Health and Wellbeing		0.14	1.75
HEA 1 - Daylighting	0		
HEA 2 - Sound Insulation	1		
HEA 3 - Private Space	0		
Management		1.11	8.00
MAN 1 - Home User Guide	3		
MAN 2 - Considerate Construction Scheme	0		
MAN 3 - Construction Site Impacts	3		
MAN 4 - Security	2		

Rating Achieved – Very Good

TOTAL POINTS – 58.52

2.4 Notes

This is a pre-assessment and not a definite route to compliance. The design team must provide the supporting evidence detailed in the technical guidance to merit credit allocations for design stage certification.