

BREEAM Ecohomes

11-12 Tottenham Mews Pre-Assessment

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1 Introduction

This BREEAM EcoHomes Pre-assessment has been prepared by FES on behalf of *Claridge Architects* for the proposed works at 11-12 Tottenham Mews, Camden.

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

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

FES

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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* and best practice guidance.

2.2 EcoHomes Commitments

ENERGY

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

SAP 2005 calculations have been carried out on the properties. The following assumptions were made;

- A gas condensing boiler will be installed with full time and temperature zone control.
- The works will adhere to the requirements of AD L1B 2010.

An average dwelling emission rate of **24.50kg/m²/year** is forecasted. **Six** credits can be awarded at the pre-assessment stage.

ENE 2 – Building Fabric.....2 Credits

SAP 2005 calculations have confirmed that an average Heat Loss Parameter of 1.55 is achieved. **Two** credits are awarded.

ENE 3 – Drying Space.....1 Credit

Dedicated drying facilities will be provided to each flat. These will be located in the bathroom and will take the form of a 4m extendable washing line. Each bathroom will be adequately heated and ventilated (a humidistat will be provided). **One** credit can be awarded.

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

The following white goods will be provided to each property.

- An A+ rated fridge/freezer.
- An A rated dishwasher and washing machine.
- A B rated tumble dryer (or washer dryer).

Two credits can be awarded at the pre-assessment.

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

100% of all internal light fittings will be fitting with a low energy bulb. **Two** credits can be awarded at the pre-assessment stage.

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

All external space lighting will be dedicated energy efficient (only accepting CFLs or similar). If security lighting is provided this will be energy efficient and be accompanied with motion and daylight controls. Communal corridor lighting will be dedicated energy efficient and be accompanied with motion controls or a time switch. **Two** credits can be awarded at the pre-assessment stage.

TRANSPORT

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

The property is within 500m of a bus stop and tube station on Tottenham Court Road. This bus service operates at regular intervals. **Two** credits can be awarded at the pre-assessment stage.

Tra 2 – Cycle Storage.....2 Credits

The current design includes a communal cycle store with sufficient space to accommodate 7 bicycles. **Two** credits can be awarded.

Tra 3 – Local Amenities.....3 Credits

The property is within 500m of a post box on Tottenham Court Road and a *Tesco Express* on Goodge Street. Furthermore the property is within 1000m of the following services;

- ATM
- Place of worship
- Public House
- Medical Centre
- Primary School

Safe pedestrian routes exist to all of the above locations. As a consequence **three** credits can be awarded.

Tra 4 – Home Office.....1 Credit

The design will include the provision of a home office in bedroom 1 of each flat. The following facilities will be provided along a 1.8m stretch of wall.

- Two double power sockets.
- Two telephone points.

Each room receives sufficient natural light from a window. **One** credit can be awarded.

POLLUTION

POL 1 – Insulant GWP.....1 Credit

The GWP of insulants used in the construction of the following elements will have a GWP of less than 5.

- Floors
- Walls
- Roof
- Cylinders & Pipes

One credit can be awarded.

POL 2 – NO_x Emissions.....3 Credits

The developer has made a commitment to provide a gas condensing boiler with confirmed NO_x emissions of less than 40mg/kWh. **Three** credits can be awarded.

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

Due to the nature of the development it is unlikely that the works will achieve the necessary standard.

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

The proposed design does not include the provision of renewable technologies.

POL 5 – Flood Risk.....2 Credits

The property is within an area with a low risk of flooding. **Two** credits can be awarded.

MATERIALS

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

The following elements will have an A Green Guide rating;

- External Walls
- Glazing
- Roof

Eight credits can be awarded at the pre-assessment stage.

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

Credits are not awarded.

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

Camden Borough Council operates recyclable waste collection system. As a consequence the developer will provide dedicated internal recycling facilities in the form of 30 litre recycling bin secured to the inside of a kitchen cupboard in each flat. **Six** credits can be awarded.

WATER

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

A detailed sanitary schedule is unavailable at the present time however the following schedule is advised;

- 150 litre bath
- Taps restricted to 6 litres/min
- 6/4 litre dual flush toilets.
- Shower restricted to 9 litres/min

A WAT 1 calculation confirms that an internal consumption of **36m³/bedspace/year** is achievable. As a consequence **four** credits can be awarded.

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

The credit is awarded by default.

ECOLOGY

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

A review of the site on Google Earth confirms that the property adheres to Checklist ECO 1. **One** credit can be awarded.

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

An enhancement will not be achieved.

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

This credit can be awarded by default.

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

A neutral enhancement will be achieved. **Two** credits can be awarded.

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

The works achieve a total internal floor area to foot print ratio greater than 3.5:1. **Two** credits can be awarded.

HEALTH & WELLBEING

HEA 1 Daylighting.....3 Credits

Whilst each room has sufficient glazing, not all flats achieve the standard due to the proximity of adjacent properties.

HEA 2 Sound Insulation.....4 Credits

Compliance with Approved Document E will be demonstrated through a series of pre-completion sound tests. The number of tests will adhere to Column B of Table 1. **Two** credits can be awarded.

HEA 3 – Private Space.....1 Credit

The credit is not awarded.

MANAGEMENT

MAN 1 – Home User Guide.....3 Credits

The developer has made a commitment to provide an Ecohomes compliant Home User Guide to each flat. **Three** credits can be awarded.

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

The site will be registered with the Considerate Constructors Scheme. A target score of 24-31.5 will be achieved. **One** credit can be awarded.

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

The contractor will be required to monitor the following activities;

- Best practice policies with respect to dust and water pollution will be adopted by all site operatives.
- Operate a SWMP.

Two credits can be awarded.

MAN 4 – Security.....2 Credits

The relevant security standards with respect to glazing and doors will be adhered to:

- LPS1175 SR1
- PAS24-1 & BS7950

One credit can be awarded.

2.3 Summary Score

The table below details the point score thought achievable for 11-12 Tottenham Mews.

	Credits Available	Credits Awarded	Weighing Factor	Points
Energy			0.22	13.75
ENE 1 - Dwelling Emission Rate	15	6		
ENE 2 – Building Fabric	2	2		
ENE 3 – Drying Space	1	1		
ENE 4 – EcoLabelled White Goods	2	2		
ENE 5 – Internal Lighting	2	2		
ENE 6 – External Lighting	2	2		
Transport			0.08	8.00
TRA 1 – Public Transport	2	2		
TRA 2 – Cycle Storage	2	2		
TRA 3 – Local Amenities	3	3		
TRA 4 – Home Office	1	1		
Pollution			0.10	5.45
POL 1 – GWP of Insulants	1	1		
POL 2 – NO _x Emissions	3	3		
POL 3 – Reduction of Surface Run-Off	2	0		
POL 4 – Renewables	3	0		
POL 5 – Flood Risk	2	2		
Materials			0.14	6.32
MAT 1 – Environmental Impact of Materials	15	8		
MAT 2 – Responsible Sourcing of Materials	6	0		
MAT 3 – Responsible Sourcing of Materials	3	0		
MAT 4 – Recycling Materials	6	6		
Water			0.10	8.33
WAT 1 – Internal Potable Water	5	4		
WAT 2 – External Potable Water	1	1		
Land Use and Ecology			0.12	8.00
ECO 1 – Ecological Value of Site	1	1		
ECO 2 – Ecological Enhancement	1	0		
ECO 3 – Protection of Ecological Features	1	1		
ECO 4 – Change in Ecological Value of Site	4	2		
ECO 5 – Building Footprint	2	2		
Health & Wellbeing			0.14	3.50
HEA 1 - Daylighting	3	0		
HEA 2 - Sound Insulation	4	2		
HEA 3 - Private Space	1	0		
Management			0.10	7.00
MAN 1 - Home User Guide	3	3		
MAN 2 - Considerate Construction Scheme	2	1		
MAN 3 - Construction Site Impacts	3	2		
MAN 4 - Security	2	1		

Rating Achieved – Very Good

TOTAL POINTS – 60.36

2.4 Evaluation

The point score on the previous page suggests that a route to compliance exists and thus all stakeholders can be assured that a Very Good rating will be achieved.