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Preliminary Assessment BREEAM 2008 Unite Student Accommodation

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Unite Student Accommodation

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Signature:



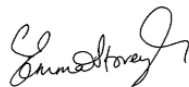
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Introduction

Unite Student Accommodation

Introduction

Eight Associates have been appointed, as registered BREEAM assessors, to provide a Preliminary Assessment of the likely score of the proposed Unite Student Accommodation, under the BREEAM 2008 Multi Residential criteria.

This preliminary assessment is based on outline drawings and completed BREEAM questionnaires provided by both Applied Energy and Bells Cooley Architects to Eight Associates.

Building Summary

The student accommodation is located at 11 - 13 St Pancras Way, Camden. The accommodation consists of nine floors of individual bedrooms with shared kitchens and living space and self contained studio flats. The floor area is 14222.4m². It is situated above a Travis Perkins Industrial Warehouse.

The accommodation will house 562 students and five staff will work there at any one time.

Camden Council Planning Requirements

The development falls under the London Borough of Camden Local Authority. As part of their planning requirements, the council requires the following:

Achieve the following BREEAM assessment rating:

- Achieve a VERY GOOD BREEAM rating

In addition:

- Achieve at least 60% of the credits within the energy and water sections under the BREEAM multi residential assessment;
- Achieve at least 40% of the materials credits under the BREEAM multi residential assessment; and
- Achieve a target of on-site renewable energy generation of at least 10% in line with the London Plan and Council policies.

Energy

In order to comply with Camden Council planning requirements, 60% of the credits available within the BREEAM Energy section must be achieved. For this assessment, this means that a minimum of 14 credits will need to be achieved in the energy section.

Water

In order to comply with Camden Council planning requirements, 60% of the credits available within the BREEAM water section must be achieved. For this assessment, this means that a minimum of 6 credits will need to be achieved in the water section.

Materials

In order to comply with Camden Council planning requirements, 40% of the credits available within the BREEAM Materials section must be achieved. For this assessment this means that a minimum of 7 credits will need to be achieved in the materials section.

Score Summary

Unite Student Accommodation

Score Summary

This preliminary assessment confirms a score of 74.47% is to be targeted for the Unite Student Accommodation. It also shows all of the BREEAM mandatory requirements for both Very Good and Excellent have been met.

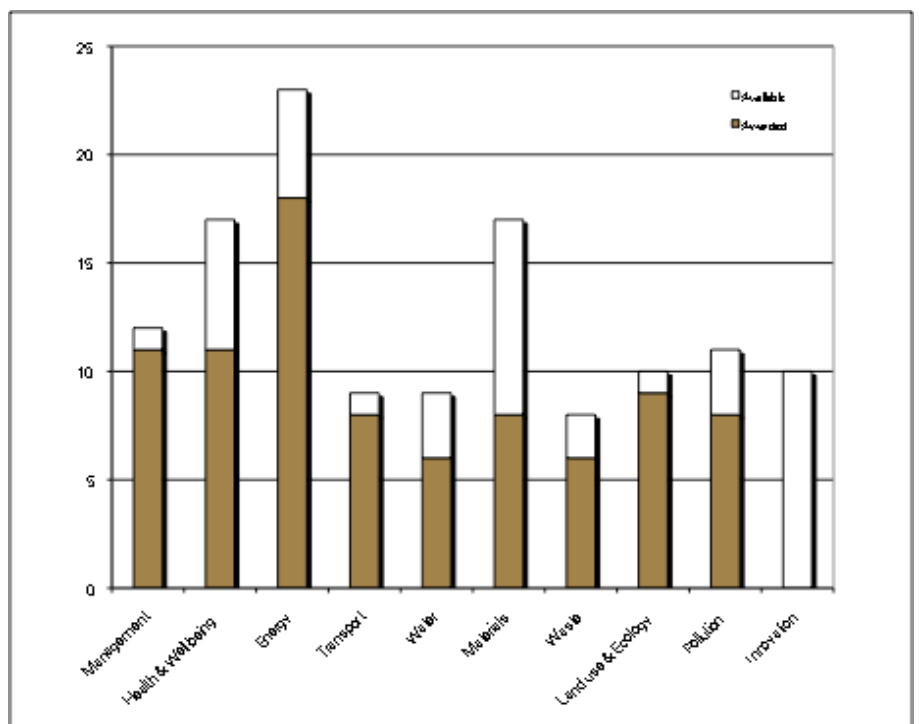
In addition the preliminary assessment confirms that 78%, 60% and 47% of the BREEAM credits are being pursued in the Energy, Water and Materials sections of BREEAM, thus meeting the Camden planning requirements.

Minimum Score Required

Pass:	30%
Good:	45%
Very Good:	55%
Excellent:	70%
Outstanding:	85%

Current Rating Summary

Credit allocation	Available	Achieved	Weighting	Score
Management	12	11	12.00%	11.00
Health & Well-being	17	11	15.00%	9.71
Energy	23	18	19.00%	14.87
Transport	9	8	8.00%	7.11
Water	9	6	6.00%	4.00
Materials	17	8	12.50%	5.88
Waste	8	6	7.50%	5.63
Land use & Ecology	10	9	10.00%	9.00
Pollution	11	8	10.00%	7.27
Innovation	10	0	10.00%	0.00
Total				74.47%
Rating				EXCELLENT



Management Unite Student Accommodation

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Likely Credits

Mandatory requirement (V. Good) met?

<p>Man 1 – Commissioning</p>	<p>A commissioning monitor will be appointed to undertake commissioning and seasonal commissioning in line with the CIBSE and BSRIA commissioning guidelines. Commissioning and seasonal commissioning will be undertaken for all simple and complex systems. Two credits are targeted.</p>	<p>2 of 2</p>	<p>✓</p>
<p>Man 2 – Considerate Constructors</p>	<p>The Contractor will be required to register the development under the Considerate Constructors Scheme (CCS) and will be committed to achieve at least 32/40 points and score of no less than 3 in each section. Two credits are targeted.</p>	<p>2 of 2</p>	
<p>Man 3 – Construction Site Impacts</p>	<p>The Contractor will be required to monitor energy and water use on site, with a named individual responsible for weekly/monthly recording and on-site graphical display of usage patterns. Targets for energy and water use will be set for the project.</p> <p>The Contractor will be required to comply with Environment Agency on-site guidelines for pollution to watercourses (Environment Agency Site Pollution Prevention Guides 1, 5 & 6) and best practices in terms of air (dust) pollution.</p> <p>The Contractor will ensure that at least 80% of site timber will be reused, recycled or sourced from FSC/PEFC suppliers and 100% will be legally sourced (non-CITES listed).</p> <p>In addition the Contractor will follow an Environmental Materials Policy and have a certified Environmental Management System. Four credits are targeted.</p>	<p>4 of 4</p>	
<p>Man 4 – Building User’s Guide</p>	<p>A non-technical building user guide will be produced for the attention of the facilities manager, staff and other operators, detailing the operation of the building and the level of its environmental performance, in line with BREEAM content requirements. One credit is targeted.</p>	<p>1 of 1</p>	
<p>Man 6 - Consultation</p>	<p>BREEAM compliant consultation has taken place with all the relevant stakeholders and will continue to take place throughout the design process. One credit is targeted.</p>	<p>1 of 2</p>	
<p>Man 8 – Security</p>	<p>Consultation with an Architectural Liaison Officer (ALO) has taken place. The recommendations of the ALO are to be incorporated into the design. One credit is targeted.</p>	<p>1 of 1</p>	

Health & Well-being

Unite Student Accommodation

Hea 1 – Daylighting	Daylighting calculations are to be undertaken for the student accommodation, however it is unclear whether the BREEAM daylighting requirements will be met. One credit is withheld.	0 of 1	
Hea 2 – View Out	All living rooms/communal lounges, bedrooms and offices will have a view out. One credit is targeted.	1 of 1	
Hea 3 Glare Control	All living rooms/communal lounges, bedrooms and offices will have glare control in the form of curtains or blinds. One credit is targeted.	1 of 1	
Hea 4 – High Frequency Lighting	All fluorescent luminaries will be installed with high frequency ballasts. This is to be specified as part of the M&E scope of works. One credit is targeted.	1 of 1	✓
Hea 5 – Internal and External Lighting Levels	All internal and external lighting will be specified to CIBSE recommended levels (LG6 & LG7 and the Code for Lighting 2006). One credit is targeted.	1 of 1	
Hea 7 – Potential for Natural Ventilation	Communal areas are to be mechanically ventilated; therefore the credit requirements cannot be met. One credit is withheld.	0 of 1	
Hea 8 – Indoor Air Quality	The credit requirements cannot be met due to close proximity of the road. One credit is withheld.	0 of 1	
Hea 9 – VOCs	Credit is not sought.	0 of 1	
Hea 10 – Thermal Comfort	Thermal modelling in line with CIBSE AM11 will be undertaken to ensure thermal comfort for occupants. One credit is targeted.	1 of 1	
Hea 11 – Thermal Zoning	Occupants will have control of heating through Thermostatic radiator valves. One credit is targeted.	1 of 1	
Hea 12 – Microbial Contamination	All water and HVAC systems will be designed to meet the requirements of the HSE's Approved Code of Practice and Guidance L8 "Legionnaires disease the control of legionella bacteria in water systems" 2000. One credit is targeted.	1 of 1	✓
Hea 15 – Outdoor Space	Outdoor space is to be provided for students however the credit requirements cannot be met due to space restrictions on site. One credit is withheld.	0 of 1	

Health & Well-being

Unite Student Accommodation

Hea 20 – Home Office

Adequate home office provision will be provided in all student bedrooms. 1 of 1
This is to include two double sockets; two telephone points, a window, adequate ventilation, a desk and bookshelf. One credit is targeted.

Hea 21 – Sound Insulation

A suitably qualified ¹ acoustician will be appointed to confirm that airborne 3 of 4
sound insulation values are at least 5dB higher and impact sound insulation values are at least 5dB lower than the performance standards set out in Building Regulations for England and Wales document E (2003 edition with amendment 2004). Three credits are targeted.

¹ **Suitably qualified acoustician:** Those organisations or individuals having UKAS accreditation or accredited by a European equivalent of UKAS. The definition includes organisations or individuals registered to schemes that are UKAS accredited, or equivalent, to ensure consistency and technical competence in sound testing. At the time of writing the Association of Noise Consultants (ANC) Registration Scheme is in the process of obtaining UKAS accreditation and can be deemed to comply with this requirement until advised otherwise.

Energy

Unite Student Accommodation

Ene 1 – Reduction of CO ₂ Emissions	Carbon emissions are to be calculated from SBEM calculation results to give an indication of annual carbon emissions.	11 of 15	
	The initial modelling output shows an EPC of 23 or lower will be achieved, resulting in eleven credits being targeted.		
Ene 2 – Sub Metering of Substantial Energy Uses	Electric sub-metering of substantive energy uses will be provided via pulsed meters. Substantive energy uses in the building will include (where present): space heating, hot water, lighting and small power. One credit is targeted.	1 of 1	✓
Ene 4 – External Lighting	No external lighting apart from security lighting is to be provided for the student accommodation. Credit is awarded by default.	1 of 1	
Ene 5 – Low zero carbon technologies	Applied Energy, who fulfils the requirements of an energy specialist ² , has carried out a fully compliant Renewable Energy Feasibility Study. A 10% reduction in the carbon emissions of the building will be achieved through the installation of CHP, as recommended by the feasibility study. Two credits are targeted.	2 of 3	
Ene 15 – Provision of Energy Efficient Equipment	Any fridges and freezers are to have a A+ rating, any dishwashers or washing machines an A rating and any tumble dryers a B rating under the EU energy Efficiency Labelling Scheme, where specified. One credit is targeted.	2 of 2	
Ene 18 – Drying Space	Internal drying space of at least 2m ² is to be provided in all bedrooms. In the self contained dwelling drying space of 4m ² is to be provided. In addition adequate ventilation will be provided for drying. One credit is targeted.	1 of 1	

² **Energy Specialist:** An individual who has acquired substantial expertise or a recognised qualification for undertaking assessments, designs and installations of low or zero carbon solutions in the commercial buildings sector; and is not professionally connected to a single low or zero carbon technology or manufacturer.



Transport

Unite Student Accommodation

Tra 1 – Provision of Public Transport	There is good accessibility to the public transport network from the development. Camden Town, Kings Cross St Pancras and Camden Road Rail are all within 500m of the development. In addition there are numerous bus stops on Pancras Road, which again is less than 500m from the development. Three credits are targeted.	3 of 3
Tra 2 – Proximity to Amenities	The development is located within 500m of a post box, grocery shop and a cash machine. It is also located within a 1km of a pharmacy, doctors surgery, community centre, leisure centre, outdoor space, place of worship and public house. Two credits are targeted.	2 of 2
Tra 3 – Cyclist Facilities	There are 562 beds on site and there will be 5 members of staff. BREEAM requires cycle storage to be provided for students (city centre location) and one space for staff members. Therefore a minimum of 142 cycle storage spaces is required. At present there is to be provision for 82 cycles on site. As a result it is unlikely that the BREEAM requirements will be met. One credit is withheld.	0 of 1
Tra 4 – Pedestrian and Cyclist Safety	Access to the student accommodation for both cycles and pedestrians is directly from the public highway; therefore credit can be awarded by default.	1 of 1
Tra 6 – Maximum Car Parking Capacity	Car parking spaces are not provided for either the staff or students. Two credits are targeted.	2 of 2

Water

Unite Student Accommodation

Wat 1 – Water Consumption	<p>Water efficient sanitary fittings including dual flush WC's with an effective flush volume of 4.5 litres are to be specified. In addition bathroom taps are to have a maximum flow rate of litres/minute, kitchen taps are to be 2 stage mixer taps and showers are to have a flow rate of less than 9litres/min.</p> <p>Finally washing machines and dishwashers are to be low water use with 40 and 12 litre/use respectively. Three credits are targeted.</p>	3 of 5	
Wat 2 – Water Meter	<p>A water meter with pulsed output will be specified to all building mains water supplies. One credit is targeted.</p>	1 of 1	
Wat 3 – Major Leak Detection	<p>A major leak detection system has been specified. One credit is targeted.</p>	1 of 1	
Wat 5 – Water Recycling	<p>Rainwater harvesting is to be provided for irrigation of the green roof. As the rainwater is not used for WC/urinal flushing the credit requirements cannot be met. One credit is withheld.</p>	0 of 1	
Wat 6 – Irrigation Systems	<p>Irrigation of the green roof is to be undertaken using reclaimed water from the rainwater harvesting. One credit is targeted.</p>	1 of 1	

Materials

Unite Student Accommodation

Mat 1 – Materials Specification – Major Building Elements	Where possible, materials specified for the roof, internal walls, windows, upper floor slabs external walls and floor finishes/coverings will be A or A+ rated under the Green Guide to Specification. Three credits are targeted.	3 of 6
Mat 2 – Hard Landscaping and Boundary Protection	The specification of the hard landscaping and boundary protection is not known at present. Therefore this credit is withheld.	0 of 1
Mat 3 – Reuse of Building Façade	Credit cannot be awarded as the development is new build.	0 of 1
Mat 4 – Reuse of Building Structure	Credit cannot be awarded as the development is new build.	0 of 1
Mat 5 – Responsible Sourcing of Materials	The design team will ensure that all timber building elements specified are FSC/PEFC certified and all other elements are sourced from suppliers who can provide ISO14001/EMAS/BES 6001 certification for process and extraction stage. Two credits are targeted.	2 of 3
Mat 6 – Insulation	Two credits will be awarded as all insulants (roof, wall, floor and building services) used on site will be A or A+ rated under the Green Guide to Specification and be sourced from suppliers and manufacturers who are EMS certified under ISO 14001. Two credits are targeted.	2 of 2
Mat 7 – Designing for Robustness	<p>Materials and features will be specified to protect vulnerable parts of the internal and external areas of the building. This will include the following:</p> <ul style="list-style-type: none"> • Protection from the effects of high pedestrian traffic in main entrances and thoroughfares; and • Protection against any internal trolley movement in service areas. <p>One credit is targeted.</p>	1 of 1
Mat 8 – Responsible Sourcing of materials – finishing elements	Credit has not been sought. Two credits are withheld.	0 of 2

Waste

Unite Student Accommodation

Wst 1 – Construction Site Waste Management	<p>The contractor will be required to undertake a pre demolition audit to maximise the recovery of materials from demolition and divert 90% by weight of non hazardous demolition waste from landfill.</p> <p>In addition the contractor will develop a Site Waste Management Plan (SWMP) in line with statutory guidance and BREEAM requirements to reduce waste throughout the construction phases.</p> <p>Finally the contractor will be required to show that less than 12.9m³ of waste will be generated per 100m² of gross internal floor area and divert 75% by weight of non hazardous construction waste from landfill. Three credits are targeted.</p>	3 of 4
Wst 2 – Recycled Aggregates	<p>This contractor will be required to use recycled aggregate for 25% of high grade aggregate used on site. One credit is targeted.</p>	1 of 1
Wst 3 – Recyclable Waste Storage	<p>Storage space for recyclable household waste will be provided in each self contained flat and communal kitchen. In addition an area dedicated to the storage of recyclable waste will be provided. This will be clearly labelled for recycling and fully comply with BREEAM size requirements. Two credits are targeted.</p>	2 of 2
Wst 5 Composting	<p>Credit is not sought.</p>	0 of 1

Land Use and Ecology

Unite Student Accommodation

LE1 – Reuse of Land	The student accommodation is being developed on a previously developed brownfield site. One credit is targeted.	1 of 1	
LE2 – Contaminated Land	At present the existing land is not deemed as contaminated. Therefore this credit will not be awarded.	0 of 1	
LE3 – Ecological Value of Land and Protection of Ecological Features	The existing site has no ecological value. Therefore there are no ecological features that need to be protected. One credit is targeted.	1 of 1	
LE4 – Mitigating Ecological Impact	An ecologist will be appointed to advise on mitigating the ecological impact of the development. There will be no negative change in the ecology of the site. Two credits are targeted.	2 of 2	✓
LE5 – Enhancing Site Ecology	A suitably qualified ecologist ³ will be appointed to carry out an ecological study of the site. A green roof is to be installed on the site and all of the ecologist’s recommendations for general enhancement of the site will be implemented. Three credits are targeted. .	3 of 3	
LE6 – Long Term Impact on Biodiversity	A suitably qualified ecologist has been appointed to carry out an ecological study of the site. In addition the contractor will be required to nominate a biodiversity champion to minimise impacts on biodiversity during construction. Two credits are targeted.	2 of 2	

³ **Suitably qualified ecologist (SQE):** An individual achieving all the following items can be considered to be “suitably qualified” for the purposes of a BREEAM assessment:

1. Holds a degree or equivalent qualification (e.g. N/SVQ level 5) in ecology or a related subject.
2. Is a practising ecologist, with a minimum of three years relevant experience (within the last five years). Such experience must clearly demonstrate a practical understanding of factors affecting ecology in relation to construction and the built environment; including, acting in an advisory capacity to provide recommendations for ecological protection, enhancement and mitigation measures. Examples of relevant experience are: ecological impact assessments; Phase 1 and 2 habitat surveys and habitat restoration.
3. Is covered by a professional code of conduct and subject to peer review.

Pollution

Unite Student Accommodation

Pol 1 – Refrigerant GWP – Building Services	The total refrigerant charge for the student accommodation will be less than 5kg. Credit is awarded by default.	1 of 1
Pol 2 – Preventing Refrigerant Leaks	The total refrigerant charge for the student accommodation will be less than 5kg. Two credits are awarded by default.	2 of 2
Pol 4 – NO_x Emissions of Heating Source	Credit requirements cannot be met. Three credits are withheld	0 of 3
Pol 5 – Flood Risk / Water Run Off	<p>A site-specific Flood Risk assessment (FRA) is being carried out for the development. The development is located in an area of low flood risk therefore two credits are targeted.</p> <p>A third credit is likely to be awarded as attenuation measures will be specified to ensure that the peak rate of run off from the site to the watercourses will be no greater for the developed site than it was for the pre developed site. This will also take into account climate change. Three credits are targeted.</p>	3 of 3
Pol 6 – Minimising Watercourse Pollution	Sustainable urban drainage systems (SuDS) will be specified in areas of relatively low watercourse pollution and oil and petrol interceptors will be specified for areas of high risk pollution. One credit is targeted.	1 of 1
Pol 7 – Reduction of Night Time Light Pollution	No external lighting has been specified for the student accommodation apart from safety lighting. This will be controlled by sensors and only activated for safety reasons. Credit awarded by default.	1 of 1