



BRE Environmental & Sustainability Standard

BES SD 5056: ISSUE 3.0

BREEAM Retail 2008 Interim Assessment Report 1st Submission

**118a Oxford Road
Reading**

Prepared on behalf of Scott White & Hookins by

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Position BREEAM Assessor

Signature



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Date 05/06/2017

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Executive Summary

Scott White & Hookins has been commissioned by J R Properties to carry out a BREEAM assessment of 118a Oxford Road, Reading. This report details the interim design stage performance of the aforementioned building development as measured against the BRE Environmental and Sustainability Standard, BREEAM Retail 2008 (BES5056 Issue 3.0).

The building has achieved a BREEAM score of 37.92%, which translates in to an interim design stage BREEAM rating of Pass. The BREEAM assessor has determined this rating using an auditable trail of evidence, all of which is referenced throughout this assessment report.

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BREEAM Certificate Information

Certificate Request Form									
BREEAM rating									
PASS	☒	GOOD	☐	V.GOOD	☐	EXCELLENT	☐	OUTSTANDING*	☐
Percentage score		37.92%		BREEAM Scheme & Version			Retail 2008		
BRE ref. no.		BREEAM-0057-8971							
Stage of assessment		Interim Design							
Report Date		05/06/2017		Assessed Net floor area:		345m2			
Project type: (BREEAM Retail, Offices, Industrial and Bespoke assessments only)									
Shell Only ☐		If shell only, do you require 'Maximum Potential Fitted Out BREEAM score' to appear on the certificate?					Yes ☐ No ☐		
Fully Fitted ☐		If yes, what is the 'Maximum Potential Fitted Out BREEAM score' (taken from assessment tool)?							
Building and Team Details									
Building name / Plot number and building address		118a Oxford Road, Reading RG1 7NL							
Licensed assessor		Kerry Davies							
Assessor organisation		Scott White and Hookins LLP							
Client		J R Properties							
Developer		J R Properties							
Architect		Robin Ashley Architects LLP							

* BREEAM Outstanding Rating <i>(mandatory if applying for BREEAM Outstanding rating)</i>		
I/we [assessor organisation/client] agree to provide/enclose (delete as appropriate) the relevant building/project information and give BRE Global permission to produce a case study on the design and development of [building name].		
It is a condition of awarding an Outstanding BREEAM rating that a case study of the assessed building is produced. The design team/client must therefore agree to provide relevant information about the project to BRE Global for production and dissemination of such a case study. Where permission is not granted or information not provided, the assessed building will be awarded an Excellent rating. Interim design stage certification On submission of the interim design stage report the client or their representative agree to provide the relevant information and give permission to BRE Global to produce and disseminate a case study for the assessed building at the final stage of BREEAM certification. The relevant information is not required for or at the interim stage of certification. Post construction certification On submission of the final post construction stage report the client or their representative agree to provide the relevant building information and give permission to BRE Global to produce and disseminate a case study of the assessed building.		
BREEAM Approved Innovations		
Have BREEAM <i>Approved Innovation</i> credits been awarded in the assessment of the above named building?	Yes ☐	No ☒
If yes, please state the BRE Global <i>Approval Number</i> for each <i>Approved Innovation</i> below:		

Introduction

Scott White & Hookins has been commissioned to carry out a BREEAM (**BRE** Environmental Assessment **M**ethod) Retail 2008 assessment of the 118a Oxford Road, Reading.

The BREEAM Standard

BREEAM (Building Research Establishment's Environmental Assessment Method) is the world's leading and most widely used environmental assessment method for buildings. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance.

The aims and objectives of BREEAM are:

Aims of BREEAM

- To mitigate the impacts of buildings on the environment
- To enable buildings to be recognised according to their environmental benefits
- To provide a credible, environmental label for buildings
- To stimulate demand for sustainable buildings

Objectives of BREEAM

- To provide market recognition to low environmental impact buildings
- To ensure best environmental practice is incorporated in buildings
- To set criteria and standards surpassing those required by regulations and challenge the market to provide innovative solutions that minimise the environmental impact of buildings
- To raise the awareness of owners, occupants, designers and operators of the benefits of buildings with a reduced impact on the environment
- To allow organisations to demonstrate progress towards corporate environmental objectives

Building projects are assessed at the design and post-construction stages using a system of environmental issues grouped within the following categories:

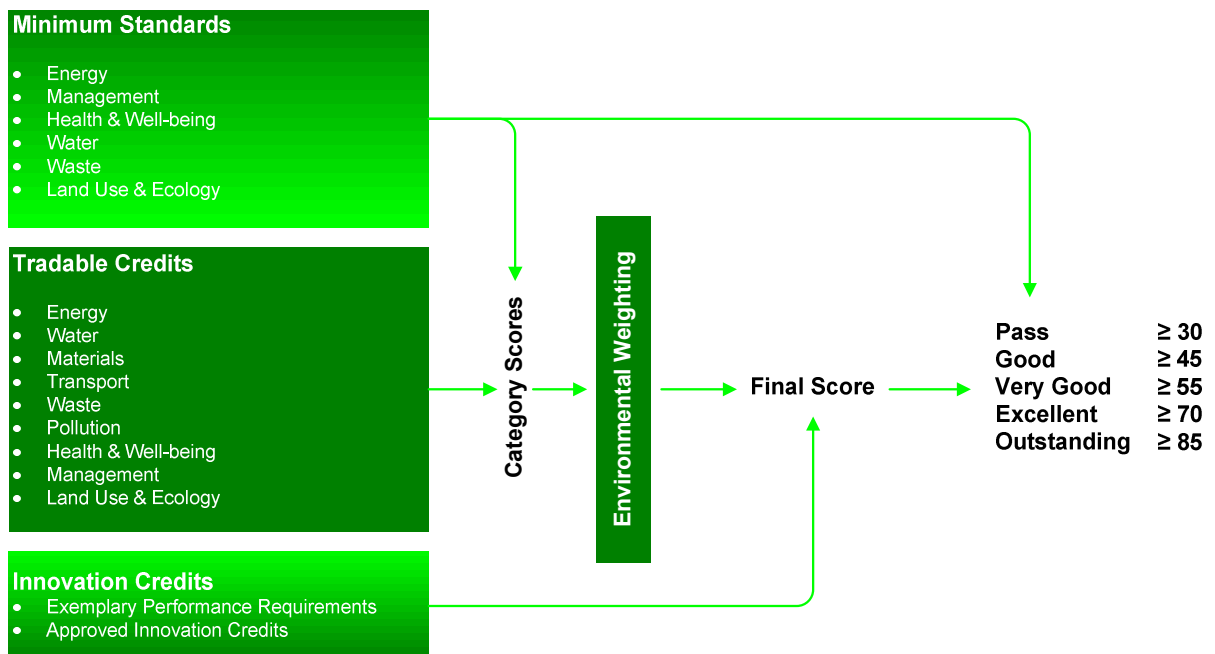
- Management
- Health and Wellbeing
- Energy
- Transport
- Water
- Materials
- Waste
- Land Use & Ecology
- Pollution
- Innovation

The assessment of the building results in a final report and BRE Global BREEAM certificate detailing the performance of the assessed building against the environmental issues covered by Standard. The building's performance is expressed as a BREEAM rating of PASS, GOOD, VERY GOOD, EXCELLENT or OUTSTANDING.

BREEAM is developed, operated and maintained by BRE Global Ltd and the operation and direction of the method is overseen by an independent Sustainability Board, representing a wide cross-section of construction industry stakeholders. Further information about BREEAM, including copies of the BREEAM standards, can be found at www.breeam.org

BREEAM Scoring & Rating

The diagram and text below describes how BREEAM scores and rates an assessed building:



The BREEAM categories contain a number of environmental issues, which reflect the options available when designing, procuring and constructing a building.

BREEAM issues and credits

Tradable credits

Each environmental issue has a set number of 'credits' available and these credits are awarded where the building demonstrates that it complies with the requirements of that issue.

Minimum standards

A number of issues within a category have set minimum standards, i.e. a minimum number of credits that must be achieved in order for a particular BREEAM rating level to be met.

Innovation credits

Innovation credits provide additional recognition for a building that innovates in the field of sustainable performance, above and beyond the level that is currently recognised and rewarded by standard BREEAM issues. Innovation credits are awarded for either complying with pre-defined BREEAM issue exemplary level requirements, through the appointment of a BREEAM Accredited Professional or Suitably Qualified Assessor or via application to BRE Global to have a particular building feature, system or process approved as 'innovative'.

Environmental weightings, final score and BREEAM Rating

Once each BREEAM issue has been assessed the category percentage scores are determined (based on the number of credits achieved over those available within a category), and an environmental weighting applied (as shown below).

The weighted category scores are then totalled to give an overall score, and any additional score for innovation is added to give the final BREEAM score which is used to determine the BREEAM rating.

The environmental weightings are as follows:

Issue Category	Issue Weighting
Management	12%
Health and Wellbeing	15%
Energy	19%
Transport	8%
Water	6%
Materials	12.5%
Waste	7.5%
Land Use and Ecology	10%
Pollution	10%

There is also an additional (up to 10%) score for Innovation, available to projects that demonstrate they have gone above and beyond the best practice levels of BREEAM.

The weighting factors have been derived from consensus based research with various groups such as government, material suppliers and lobbyists. This research was carried out by BRE to establish the relative importance of each environmental issue.

Project Team and Building Details

Project Team Details

Name / Position	Company / Address
Client	J R Properties 40 Newbridge Lane Stockport Cheshire SK1 2NA
Architect	Robin Ashley Architects LLP Hawk Works 105 Mary Street Sheffield S1 4RT

Building Details

General	Building	The project consists of a major refurb of the ground and first floors and an extension to the existing building of an additional floor. The scheme is therefore predominantly refurbishment with the works making it a three building storey from two storey.
	Site	The site is located on Oxford Road into Reading the footprint remains unchanged (refurbishment with additional floor also added).
	Floor area	345m2 (115m2 new build and 230m2 refurbishment)
Building fabric	Walls	Existing external masonry walls are to remain. New external wall to the vertical extension.
	Roof	New roof system to be installed to newly constructed second floor.
	Floor	Existing floors is to remain.
Building Services	Heating	Inverter heat pumps are incorporated into the design. Radiators to be installed in majority of rooms,
	Ventilation	Majority of rooms are mechanically ventilated with heat recovery units.
	Cooling	Specified rooms to be heated and cooled using refrigerant based (VRF) fan coil units.
	Hot water	Existing boiler to remain.
Other	Low Carbon Technology	N/A

Summary of Building's Assessment Performance

118a Oxford Road, Reading achieves an interim score of **37.92%** against the BREEAM Retail 2008 Environmental and Sustainability Standard. This translates into an interim BREEAM rating of **Pass**.

Stage of Assessment	BREEAM Score	BREEAM Rating
0	37.92%	PASS

Minimum BREEAM Standards					
Rating Level	Pass	Good	Very Good	Excellent	Outstanding
Minimum Standards Achieved	YES	YES	NO	NO	NO

Building Performance by Section					
	Environmental weighting	Credits available	Credits achieved	% Achieved	Weighted Score
Management	12.00%	10.00	9.00	90.00%	10.80%
Health & Wellbeing	15.00%	7.00	4.00	57.14%	8.57%
Energy	19.00%	22.00	0.00	0.00%	0.00%
Transport	8.00%	12.00	5.00	41.67%	3.33%
Water	6.00%	9.00	6.00	66.67%	4.00%
Materials	12.50%	13.00	1.00	7.69%	0.96%
Waste	7.50%	6.00	3.00	50.00%	3.75%
Land Use & Ecology	10.00%	10.00	4.00	40.00%	4.00%
Pollution	10.00%	12.00	3.00	25.00%	2.50%
Innovation	10.00%	10.00	0.00	0.00%	0.00%
Total BREEAM Score					37.92%

Detailed Assessment of Building Performance

The following section summarises each of the issue requirements for this BREEAM assessment by environmental section, and the information that has been provided as evidence of the buildings performance against those requirements. On the basis of the documentary evidence provided, the relevant number of BREEAM credits have either been awarded or withheld.

Each issue assessed includes the BREEAM assessor's validation statement. This statement summarises their assessment of the buildings performance against the BREEAM issue requirements, validating the number of BREEAM credits awarded.

Management

Management
Man 1 - Commissioning

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	1	1	1	1	2

Number of credits achieved:	2
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Aim

To recognise and encourage an appropriate level of building services commissioning that is carried out in a co-ordinated and comprehensive manner, thus ensuring optimum performance under actual occupancy conditions.

Criteria

Two credits available as follows:

Credits	
1	Where evidence provided demonstrates that an appropriate project team member has been appointed to monitor commissioning on behalf of the client to ensure commissioning will be carried out in line with current best practice.
2	Where, in addition to the above, evidence provided demonstrates that seasonal commissioning will be carried out during the first year of occupation, post construction (or post fit out).

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Second Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.1 BREEAM Specification Richer Sounds	

Validation Statement

Ref.1 - Details within the BREEAM Spec provided confirm the criteria for credits 1 and 2 will be met.

Two credits have been achieved.

Management
Man 2 – Considerate Constructors

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	1	2

Number of credits achieved:	2
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Aim

To recognise and encourage construction sites which are managed in an environmentally and socially considerate and accountable manner.

Criteria

Two credits available as follows:

Credits	
1	Where evidence provided demonstrates that there is a commitment to comply with best practice site management principles.
2	Where evidence provided demonstrates that there is a commitment to go beyond best practice site management principles.

Schedule of Evidence

Number of Credits achieved? (For full explanation, please refer to Validation Statement)	2
Ref.1 BREEAM Specification Richer Sounds	

Validation Statement

Ref.1 - Details within the BREEAM Spec provided confirms 2 credits are targeted and the contractor will need to obtain a score of between 35-39 with at least 7 scored in each section.

Two credits have been achieved

Management
Man 3 – Construction Site Impacts

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	4
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Aim

To recognise and encourage construction sites managed in an environmentally sound manner in terms of resource use, energy consumption and pollution.

Criteria

Four credits available as follows:

Credits	
1	Where evidence provided demonstrates that 2 or more of items a-g (listed below) are achieved.
2	Where evidence provided demonstrates that 4 or more of items a-g (listed below) are achieved.
3	Where evidence provided demonstrates that 6 or more of items a-g are achieved: a. Monitor, report and set targets for CO₂ or energy arising from site activities b. Monitor, report and set targets for CO₂ or energy arising from transport to and from site c. Monitor, report and set targets for water consumption arising from site activities d. Implement best practice policies in respect of air (dust) pollution arising from the site e. Implement best practice policies in respect of water (ground and surface) pollution occurring on the site f. Main contractor has an environmental materials policy, used for sourcing of construction materials to be utilised on site g. Main contractor operates an Environmental Management System.
1	Where evidence provided demonstrates that at least 80% of site timber is responsibly sourced and 100% is legally sourced.

Schedule of Evidence

Number of Credits achieved? <i>(For full explanation, please refer to Validation Statement)</i>	3/3
Fourth (Timber) Credit achieved? <i>(For full explanation, please refer to Validation Statement)</i>	Yes (1/1)
Ref.1 BREEAM Specification Richer Sounds Ref.2 Checklist A3 Construction Site Impacts completed Ref.3 Email that contains A3	

Validation Statement

Ref.1 - BREEAM Spec provided confirms three credits are targeted and at least 6 items a-g will be achieved. Additional credit for responsibly sourced timber also achieved.

Ref.2 – Completed A3 checklist provided.

Ref.3 – Email that contained Ref.2 for auditable purposes to show who provided it.

Four credits have been achieved.

Management
Man 4 – Building User Guide

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	1	1

Number of credits achieved:	1
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Aim

To recognise and encourage the provision of guidance for the non-technical building user so they can understand and operate the building efficiently.

Criteria

Credits	
1	Where evidence provided demonstrates the provision of a simple guide that covers information relevant to the tenant/occupants and non-technical building manager on the operation and environmental performance of the building.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.1 BREEAM Specification Richer Sounds	

Validation Statement

Ref.1 - Within the BREEAM Spec it confirms the contents of the BUG and that it will be available in a stand-alone guide.

One credit has been achieved.

Management
Man 8 - Security

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage the implementation of effective design measures that will reduce the opportunity for and fear of crime on the new development.

Criteria

Credits	
1	Where evidence provided demonstrates that an <i>Architectural Liaison Officer</i> (ALO) or <i>Crime Prevention Design Advisor</i> (CPDA) from the local police force has been consulted at the design stage and their recommendations incorporated into the design of the building and its parking facilities (if relevant).

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No

Validation Statement

This credit is not sought

Health and Wellbeing

Health & Wellbeing
Hea 1 Daylighting

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To give building users sufficient access to daylight.

Criteria

OFFICES/SCHOOLS AND FURTHER EDUCATION/COURTS/INDUSTRIAL/ BESPOKE/MULTI-RESIDENTIAL SPECIFIC

Credits	
1	Where evidence provided demonstrates that at least 80% of the total <i>occupied</i> floor area is adequately day lit.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No
No evidence provided.	

Validation Statement

This credit is not sought.

Health & Wellbeing
Hea 4 – High Frequency Lighting

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	1	1	1	1	1

Number of credits achieved:	1
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Aim

To reduce the risk of health problems related to the flicker of fluorescent lighting.

Criteria

Credits	
1	Where evidence provided demonstrates that high frequency ballasts are installed on all fluorescent and compact fluorescent lamps.

Schedule of Evidence

<i>First Credit achieved? (For full explanation, please refer to Validation Statement)</i>	Yes
Ref.1 BREEAM Specification Richer Sounds	

Validation Statement

Ref.1 - Within the BREEAM Spec it confirms no high frequency ballasts will be used as LEDs will be installed throughout the building.

One credit has been achieved.

Health & Wellbeing
Hea 5 – Internal and external lighting levels

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	1
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Aim

To ensure lighting has been designed in line with best practice for visual performance and comfort.

Criteria

OFFICES/RETAIL/EDUCATION/COURTS/HEALTHCARE/INDUSTRIAL/BESPOKE/MULTI-RESIDENTIAL SPECIFIC

Credits	
1	Where evidence provided demonstrates that all internal and external lighting, where relevant, is specified in accordance with the appropriate maintained luminance levels (in lux) recommended by CIBSE.

Schedule of Evidence

<i>First Credit achieved? (For full explanation, please refer to Validation Statement)</i>	Yes
Ref.1 BREEAM Specification Richer Sounds	

Validation Statement

Ref.1 - BREEAM Spec confirms the lighting standard will be met for internal and external lighting areas.

One credit has been achieved.

Health & Wellbeing
Hea 8 – Indoor air quality

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To reduce the risk to health associated with poor indoor air quality.

Criteria

Credits	
1	Where air intakes serving occupied areas avoid major sources of external pollution and recirculation of exhaust air.

Schedule of Evidence

First Credit achieved? <i>(For full explanation, please refer to Validation Statement)</i>	No
No evidence provided.	

Validation Statement

This credit is not sought.

Health & Wellbeing
Hea 9 – Volatile Organic compounds

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	1
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Aim

To recognise and encourage a healthy internal environment through the specification of internal finishes and fittings with low emissions of volatile organic compounds (VOCs).

Criteria

Credits	
1	Where evidence provided demonstrates that the emissions of VOCs and other substances from key internal finishes and fittings comply with best practice levels.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.1 BREEAM Specification Richer Sounds	

Validation Statement

Ref.1 - Within the BREEAM Spec it confirms that all relevant products specified will meet the required testing standards.

One credit has been achieved

Health & Wellbeing
Hea 10 Thermal comfort

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To ensure, with the use of design tools, that appropriate thermal comfort levels are achieved.

Criteria

Credits	
1	Where evidence provided demonstrates that thermal comfort levels in <i>occupied spaces</i> of the building are assessed at the design stage to evaluate appropriate servicing options, ensuring appropriate thermal comfort levels are achieved.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No

Validation Statement

This credit is not sought

Health & Wellbeing
Hea 12 – Microbial contamination

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	1	1	1	1	1

Number of credits achieved:	1
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Aim

To ensure the building services are designed to reduce the risk of legionellosis in operation.

Criteria

Credits	
1	Where evidence provided demonstrates that the risk of waterborne and airborne legionella contamination has been minimised.

Schedule of Evidence

<i>First Credit achieved? (For full explanation, please refer to Validation Statement)</i>	Yes
Ref.1 BREEAM Specification Richer Sounds	

Validation Statement

Ref.1 - The BREEAM Spec confirms the water systems will be designed in accordance with the required guidance and that no humidification is present in the building.

One credit has been achieved.

Energy

Energy
Ene 1 – Reduction of CO ₂ emissions

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	6	10

Number of credits achieved:	0
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Aim

To recognise and encourage buildings that are designed to minimise the CO₂ emissions associated with their operational energy consumption.

Criteria

Up to 15 credits are available:

Credits	
15	Where evidence provided demonstrates an improvement in the energy efficiency of the building's fabric and services and therefore achieves lower building operational related CO ₂ emissions.

Schedule of Evidence

0 of 15 Credits achieved <i>(For full explanation please refer to Validation Statement)</i>

Validation Statement

These credits are not sought

Energy
Ene 2 – Sub-metering of substantial energy uses

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	1	1	1

Number of credits achieved:	0
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Aim

To recognise and encourage the installation of energy sub-metering that facilitates the monitoring of in-use energy consumption.

Criteria

OFFICES/RETAIL/EDUCATION/PRISONS/COURTS/INDUSTRIAL/BESPOKE/MULTI-RESIDENTIAL SPECIFIC

Credits	
1	Where evidence provided demonstrates the provision of direct sub-metering of energy uses within the building.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No

Validation Statement

This credit is not currently sought in this submission.

Energy
Ene 3 – Sub-metering of high energy load areas and tenancy

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage the installation of energy sub-metering that facilitates the monitoring of in-use energy consumption by tenant or end user.

Criteria

Credits	
1	Where provision of accessible sub-meters covering the energy supply to all tenanted, relevant function areas or department within the building and will be labelled with the end energy consuming use.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No

Validation Statement

This credit is not sought

Energy
Ene 4 – External lighting

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage the specification of energy-efficient light fittings for external areas of the development.

Criteria

Credits	
1	Where energy-efficient external lighting is specified and all light fittings are controlled for the presence of daylight.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No

Validation Statement

This credit is not sought in this submission

Energy
Ene 5 – Low or zero carbon technologies

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	1	1

Number of credits achieved:	0
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Aim

To reduce carbon emissions and atmospheric pollution by encouraging local energy generation from renewable sources to supply a significant proportion of the energy demand.

Criteria

Up to a maximum of three credits can be awarded as follows:

Credits	
1	Where evidence provided demonstrates that a feasibility study considering local (<i>on-site</i> and/or <i>near site</i>) low or zero carbon (LZC) technologies has been carried out and the results implemented.
2	Where evidence provided demonstrates that the first credit has been achieved and there is a 10% reduction in the building's CO ₂ emissions as a result of the installation of a feasible local LZC technology.
3	Where evidence provided demonstrates that the first credit has been achieved and there is a 15% reduction in the building's CO ₂ emissions as a result of the installation of a feasible local LZC technology.

Alternatively a maximum of one credit is awarded as follows:

Credits	
1	Where evidence provided demonstrates that a contract with an energy supplier is in place to provide sufficient electricity used within the assessed building/development to meet the above criteria from a 100% renewable energy source. (Note: a standard Green Tariff will not comply)

Schedule of Evidence

0 of 3 Credits achieved <i>(For full explanation please refer to Validation Statement)</i>

No evidence provided

Validation Statement

This credit is not sought.

Energy
Ene 6 – Building fabric performance and avoidance of air infiltration

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage measures taken to minimise heat loss and air infiltration through the building fabric

Criteria

Credits	
1	To minimise heat loss and air infiltration through the building fabric from treated/conditioned spaces

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No

Validation Statement

This credit is not sought

Transport

Transport
Tra 1 – Provision of public transport

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	4
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Aim

To recognise and encourage development in proximity to good public transport networks, thereby helping to reduce transport-related emissions and traffic congestion.

Criteria

Other Retail

Credits	
5	The credits are awarded on a sliding scale based on the assessed buildings' accessibility to the public transport network.

Schedule of Evidence

4 of 5 Credits achieved (For full explanation please refer to Validation Statement)
Ref.4 Oxford Road Reading TS Final Issue 1 Ref.5 Tra 1 118a Oxford Road Ref.6 Bus 143 143A times Ref.7 Bus jet black map Ref.8 Bus jet black times Ref.9 Bus lime2 times Ref.10 Bus purple 17 map Ref.11 Bus purple 17 times Ref.12 Bus royal blue 33 map Ref.13 Bus royal blue 33 times Ref.14 Bus sky blue 15 map Ref.15 Bus sky blue 15 times Ref.16 Bus sky blue 16 map Ref.17 Bus sky blue 16 times Ref.18 Bus yellow 26 map Ref.19 Bus yellow 26 times Ref.20 BREEAM_UK_NC_2014_Tra01_Calculator_v2.0

Validation Statement

Ref.4 – Transport Statement has been received and this details several bus services within 115m and two train stations, one within 550m (Reading West) and one within 1km (Reading). Statement also details the frequency of rail services to the relevant train stations.

Ref.5 – Map provided by the Assessor to confirm the location of the bus stop and the safe walking distance to the two train station.

Ref.6-19 – Bus timetables and maps detailing frequency of services – the maps confirm the buses go past the relevant bus stop but is not detailed within the timetables and so the nearest relevant bus stop is used instead (typically Central Reading or Reading Town Centre)

Ref.20 – The Tra 1 calculator has been completed and details an AI of 16.78, achieving four credits.

Four credits have been achieved.

Transport
Tra 2– Proximity to amenities

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	1
-----------------------------	---

Aim

To encourage and reward a building that is located in proximity to local amenities, thereby reducing the need for extended travel or multiple trips.

Criteria

Credits	
1	Where evidence provided demonstrates that the building is located within 500m of <i>accessible local amenities</i> appropriate to the building type and its users.

Schedule of Evidence

<i>First Credit achieved? (For full explanation, please refer to Validation Statement)</i>	Yes
Ref.4 Oxford Road Reading TS Final Issue 1 Ref.21 Tra 2 maps to amenities	

Validation Statement

Ref.4 - Transport Study confirms Tesco Express within 250m safe walking distance.

Ref.21 – Information confirmed by the Assessor to show there is a food outlet (Tesco Express) with a cash machine available and post box located nearby, all within 500m safe walking distance of the assessed building.

One credit has been achieved

Transport
Tra 3 – Cyclist facilities

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To encourage building users to cycle by ensuring adequate provision of cyclist facilities.

Criteria

EDUCATION SPECIFIC

Primary school and Higher Education

Credits	
1	Where evidence provided demonstrates that covered, secure and well-lit cycle storage facilities are provided for all <i>building users</i> .
2	Where, in addition to the above, adequate changing facilities are provided for staff use.

Schedule of Evidence

First Credit achieved? <i>(For full explanation, please refer to Validation Statement)</i>	No
Second Credit achieved? <i>(For full explanation, please refer to Validation Statement)</i>	No
No evidence provided	

Validation Statement

This credit is not sought.

Transport
Tra 4 – Pedestrian and cyclist safety

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage the provision of safe and secure pedestrian and cycle access routes on the development.

Criteria

Higher Education Type 1.

Credits	
1	Where evidence provided demonstrates that the site layout has been designed in accordance with best practice to ensure safe and adequate pedestrian and cycle access.

Schedule of Evidence

First Credit achieved? <i>(For full explanation, please refer to Validation Statement)</i>	No
No evidence provided.	

Validation Statement

This credit is not sought.

Transport
Tra 5 Travel plan

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise the consideration given to accommodating a range of travel options for building users, thereby encouraging the reduction of user reliance on forms of travel that have the highest environmental impact.

Criteria

Credits	
1	Where evidence provided demonstrates that a travel plan has been developed and tailored to the specific needs of the <i>building users</i> .

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No
No evidence provided	

Validation Statement

This credit is not sought.

Transport
Tra 8 Deliveries & manoeuvring

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To ensure that safety is maintained and disruption due to delivery vehicles minimised through well-planned layout and access to the site..

Criteria

Credits	
1	Where evidence provided demonstrates that vehicular access areas have been designed to ensure adequate space for manoeuvring delivery vehicles and provide space away from manoeuvring area for storage of refuse skips and pallets.

Schedule of Evidence

<i>First Credit achieved?</i> (For full explanation, please refer to Validation Statement)	No
No evidence provided	

Validation Statement

This credit is not sought.

Water

Water
Wat 1 – Water Consumption

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	1	1	1	2

Number of credits achieved:	3
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Aim

To minimise the consumption of potable water in sanitary applications by encouraging the use of low water use fittings.

Criteria

OFFICES/RETAIL/EDUCATION/COURTS/HEALTHCARE/INDUSTRIAL/BESPOKE SPECIFIC

Credits	
3	Where evidence provided demonstrates that the specification includes taps, urinals, WCs and showers that consume less potable water in use than standard specifications for the same type of fittings.

Schedule of Evidence

3 of 3 Credits achieved <i>(For full explanation please refer to Validation Statement)</i>	
Ref.22 Wat 1 and 2 email Ref.23 WC1 GL1738WH Ref.24 B8263AA_DataSheet_avon21washbasin1holemixervariabletempcontrolflexitails Ref.25 2008_Wat_1_calculator_rev02 Ref.26 2270-TD-202-00	

Validation Statement

Ref.22 – Email received to confirm the sanitaryware types to be installed (WC and basin tap only).

Ref.23 – Data sheet confirming specified WC has a dual flush of 4/2.6 = effective flush volume of 2.95litres. This achieves the first two credits.

Ref.24 – Data sheet for the specified tap confirms it has a flow rate of 3.7litres and is a push tap, achieving the third credit (no showers or urinals are specified for the project).

Ref.25 – Wat 1 calculator completed.

Ref.26 – Drawing layout confirms there are two proposed individual WCs only.

Three credits have been achieved.

Water
Wat 2 – Water meter

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	1	1	1	1

Number of credits achieved:	1
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Aim

To ensure water consumption can be monitored and managed and therefore encourage reductions in water consumption.

Criteria

Credits	
1	Where evidence provided demonstrates that a water meter with a pulsed output will be installed on the mains supply to each building/unit.

Schedule of Evidence

<i>First Credit achieved?</i> (For full explanation, please refer to Validation Statement)	Yes
Ref.22 Wat 1 and 2 email Ref.27 2270-TD-200-00 ground floor plan + proposed water meter location Ref.28 Wat 2 email Ref.29 Jet Range Water Meter	

Validation Statement

Ref.22 – Email that contains the water meter literature (Ref.29).

Ref.27 – Drawing showing the location of the water meter.

Ref.28 – Email that contains the drawing Ref.27.

Ref.29 – Manufacturers literature for the specified water meter confirms it has pulsed output.

One credit has been achieved

Water
Wat 3 – Major leak detection

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To reduce the impact of major water leaks that may otherwise go undetected.

Criteria

Credits	
1	Where evidence provided demonstrates that a leak detection system is specified or installed on the buildings water supply.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No
No evidence provided	

Validation Statement

This credit is not sought.

Water
Wat 4 – Sanitary supply shut-off

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	1
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Aim

To reduce the risk of minor leaks in toilet facilities.

Criteria

Credits	
1	Where evidence provided demonstrates that proximity detection shut-off is provided to the water supply to all toilet areas.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.1 BREEAM Specification Richer Sounds Ref.26 2270-TD-202-00	

Validation Statement

Ref.1 - BREEAM Spec confirms sanitary supply shut-off valves will be installed.

Ref.26 - Drawing received showing the location of the WCs to be installed.

One credit has been achieved

Water
Wat 5 – Water recycling

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To encourage the collection and re-use of waste water or rainwater to meet toilet flushing needs and reduce the demand for potable fresh water.

Criteria

EDUCATION/COURTS/BESPOKE/MULTI-RESIDENTIAL SPECIFIC

Credits	
1	Where evidence provided demonstrates the specification of systems that collect, store and, where necessary treat, rainwater or greywater for WC and urinal flushing purposes.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No
No evidence provided	

Validation Statement

This credit is not sought.

Water
Wat 6 – Irrigation systems

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	1
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Aim

To reduce the consumption of potable water for ornamental planting and landscape irrigation.

Criteria

Credits	
1	Where evidence provided demonstrates that a low-water irrigation strategy/system has been installed, or where planting and landscaping is irrigated via rainwater or reclaimed water.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.1 BREEAM Specification Richer Sounds	

Validation Statement

Ref.1 - Confirmed in BREEAM Spec that any planting provided would rely solely on precipitation through all seasons of the year.

One credit has been achieved.

Materials

Materials
Mat 1 – Materials specification

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage the use of construction materials with a low environmental impact over the full life cycle of the building.

Criteria

Credits	
6	The credits are determined using the <i>Green Guide to Specification</i> ratings for the major building elements.

Schedule of Evidence

0 of 6 Credits achieved (For full explanation please refer to Validation Statement)

Validation Statement

These credits are not sought

Materials
Mat 2 – Hard landscaping and boundary protection

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	1
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Aim

To recognise and encourage the specification of materials for boundary protection and external hard surfaces that have a low environmental impact, taking account of the full life cycle of materials used.

Criteria

Credits	
1	Where evidence provided demonstrates that at least 80% of the combined area of external hard landscaping and boundary protection specifications achieve an A or A+ rating, as defined by the <i>Green Guide to Specification</i> .

Schedule of Evidence

<i>First Credit achieved? (For full explanation, please refer to Validation Statement)</i>	Yes
Ref.30 15-035-15 30-05-17 - RAA to SHW - BREEAM materials	

Validation Statement

Ref.30 - Letter received to confirm no new hard standing is proposed and that all existing to remain. All existing to remain = A+ rating and credit can be awarded by default.

One credit has been achieved.

Materials
Mat 3 – Reuse of building facade

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage the in-situ reuse of existing building façades.

Criteria

Credits	
1	Where evidence provided demonstrates that at least 50% of the total final façade (by area) is reused in situ and at least 80% of the reused façade (by mass) comprises in-situ reused material.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No

Validation Statement

This credit is not sought in this submission

Materials
Mat 4 – Reuse of building structure

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage the reuse of existing structures that previously occupied the site.

Criteria

Credits	
1	Where evidence provided demonstrates that a design reuses at least 80% of an existing primary structure and, for part refurbishment and part new build, the volume of the reused structure comprises at least 50% of the final structure's volume.

Schedule of Evidence

First Credit achieved? <i>(For full explanation, please refer to Validation Statement)</i>	No

Validation Statement

This credit is not sought in this submission

Materials
Mat 5 – Responsible sourcing of materials

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage the specification of responsibly sourced materials for key building elements.

Criteria

OFFICES/RETAIL/PRISONS/EDUCATION/COURTS/HEALTHCARE/INDUSTRIAL/BESPOKE/MULTI-RESIDENTIAL SPECIFIC (New Build and Major Refurbishment assessments)

Credits	
3	Up to 3 credits are available where evidence provided demonstrates that 80% of the assessed materials in the following building elements are responsibly sourced: a. Structural Frame b. Ground floor c. Upper floors (including separating floors) d. Roof e. External walls f. Internal walls g. Foundation/substructure h. Staircase Additionally 100% of any timber must be legally sourced.

Schedule of Evidence

0 of 3 Credits achieved <i>(For full explanation please refer to Validation Statement)</i>

Validation Statement

These credits are not sought

Materials
Mat 6 – Insulation

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage the use of thermal insulation which has a low embodied environmental performance relative to its thermal properties and has been responsibly sourced.

Criteria

Up to two credits are available as follows:

Credits	
1	Where evidence provided demonstrates that thermal insulation products used in the building have a low embodied impact relative to their thermal properties, determined by the <i>Green Guide to Specification</i> ratings.
1	Where evidence provided demonstrates that thermal insulation products used in the building have been responsibly sourced.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No
Second Credit achieved? (For full explanation, please refer to Validation Statement)	No

Validation Statement

This credit is not sought in this submission

Materials
Mat 7 – Designing for robustness

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage adequate protection of exposed parts of the building and landscape, therefore minimising the frequency of use of replacement materials.

Criteria

Credits	
1	Where protection is given to vulnerable parts of the building such as areas exposed to high pedestrian traffic, vehicular and trolley movements.

Schedule of Evidence

<i>First Credit achieved? (For full explanation, please refer to Validation Statement)</i>	No

Validation Statement

This credit is not sought in this submission

Waste

Waste
Wst 1 – Construction site waste management

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	2
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Aim

To promote resource efficiency via the effective and appropriate management of construction site waste.

Criteria

OFFICES/RETAIL/EDUCATION/PRISONS/COURTS/HEALTHCARE/INDUSTRIAL/BESPOKE/MULTI-RESIDENTIAL SPECIFIC (New build and refurbishment assessments)

Credits	
3	Up to three credits are available where evidence provided demonstrates that the amount of non-hazardous construction waste (m ³ /100m ² or tonnes/100m ²) generated on site by the development is the same as or better than good or best practice levels.
1	Where evidence provided demonstrates that a significant majority of non-hazardous construction waste generated by the development will be diverted from landfill and reused or recycled.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Second Credit achieved? (For full explanation, please refer to Validation Statement)	No
Third Credit achieved? (For full explanation, please refer to Validation Statement)	No
Fourth Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.1 BREEAM Specification Richer Sounds	

Validation Statement

Ref.1 - BREEAM Spec details a targeted waste level of between 13-16.6m³ / 6.6-8.5 tonnes, achieving one credit for waste levels. Also confirms there will be a compliant SWMP. Also confirms that the additional credit is being targeted and that at least 75% weight/65% volume of waste will be diverted from landfill.

Two credits have been achieved.

Waste
Wst 2 – Recycled aggregates

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage the use of recycled and secondary aggregates in construction, thereby reducing the demand for virgin material.

Criteria

Credits	
1	Where evidence provided demonstrates the significant use of recycled or secondary aggregates in 'high-grade' building aggregate uses.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No
No evidence provided	

Validation Statement

This credit is not sought

Waste
Wst 3 – Recyclable waste storage

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	1	1

Number of credits achieved:	1
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Aim

To recognise the provision of dedicated storage facilities for a building's operational-related recyclable waste streams, so that such waste is diverted from landfill or incineration.

Criteria

EDUCATION SPECIFIC (All educational buildings)

Credits	
1	Where a central, dedicated space is provided for the storage of the building's recyclable waste streams.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.1 BREEAM Specification Richer Sounds Ref.31 2270-TD-100-00 + waste storage arrangements Ref.32 Email confirms waste streams Ref.33 Email confirms labelling Ref.34 Wst 3 email	

Validation Statement

Ref.1 - The BREEAM Spec confirms a BREEAM compliant waste storage area for recyclable waste will be provided.

Ref.31 - Drawing received to show the location of bin store areas.

Ref.32 - Email received to confirm the likely waste streams.

Ref.33 - Email confirms the bins are colour coded and staff training is undertaken.

Ref.34 – Email confirms the bins and storage area m2.

One credit has been achieved.

Land Use & Ecology

Land Use & Ecology
LE1 – Reuse of land

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	1
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Aim

To encourage the reuse of land that has been previously developed, and discourage the use of previously undeveloped land for building.

Criteria

Credits	
1	Where evidence is provided to demonstrate that the majority of the footprint of the proposed development falls within the boundary of previously developed land.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.35 15-035-15 30-05-17 - RAA to SHW - BREEAM LE Credits Ref.36 Oxford Road Reading TS Final Issue 1 Ref.37 2270-TD-010-00 Ref.38 2270-TD-100-00	

Validation Statement

Ref.35 - Letter received to confirm 100% of the site is located on previously developed land.

Ref.36 - Photos within the Transport Statement clearly show no planting and that it is all hardstanding around the existing building with no proposal to increase the footprint of the existing building.

Ref.37 – Drawing detailing existing layout.

Ref.38 – Drawing detailing the proposed.

One credit has been achieved.

Land Use & Ecology
LE2 – Contaminated land

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To encourage positive action to use contaminated land that otherwise would not have been remediated and developed.

Criteria

Credits	
1	Where evidence is provided to demonstrate that the land used for the new development has, prior to development, been defined as contaminated and adequate remedial steps have been taken to decontaminate the site prior to construction.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No
No evidence provided.	

Validation Statement

This credit is not sought.

Land Use & Ecology
LE3 – Ecological value of site and protection of ecological features

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	1
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Aim

To encourage development on land that already has limited value to wildlife and to protect existing ecological features from substantial damage during site preparation and completion of construction works.

Criteria

Credits	
1	Where evidence provided demonstrates that the site's construction zone is defined as land of low ecological value and all existing features of ecological value will be fully protected from damage during site preparation and construction works.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.35 15-035-15 30-05-17 - RAA to SHW - BREEAM LE Credits Ref.39 Checklist A4 completed	

Validation Statement

Ref.35 – Letter received confirms no negative change in the ecological value of the site.

Ref.39 - Land is confirmed to be of low ecological value as confirmed within the A4 checklist.

One credit has been achieved.

Land Use & Ecology
LE4 – Mitigating Ecological Impact

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	1	1	1

Number of credits achieved:	2
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Aim

To minimise the impact of a building development on existing site ecology.

Criteria

Credits	
1	Where evidence provided demonstrates that the change in the site's existing ecological value, as a result of development, is <i>minimal</i> .
2	Where evidence provided demonstrates that there is <i>no negative change</i> in the site's existing ecological value as a result of development.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Second Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.37 2270-TD-010-00 Ref.38 2270-TD-100-00 Ref.40 Email confirms areas Ref.41 2008_LE4_and_LE5_calculator_rev01_Final	

Validation Statement

Ref.37 – Existing site plan and Ref.38 – proposed site plans received. These clearly show no existing planting and that the proposed site will include 2 trees. This therefore means there would be no negative impact on the existing ecology.

Ref.40 – Email confirms the areas.

Ref.41 - The Le 4 calculator has been completed and confirms the change in ecological value of the site is zero, therefore achieving 2 credits.

Two credits have been achieved.

Land Use & Ecology
LE5 – Enhancing site ecology

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To recognise and encourage actions taken to maintain and enhance the ecological value of the site as a result of development.

Criteria

OFFICES/RETAIL/EDUCATION/COURTS/HEALTHCARE/INDUSTRIAL/BESPOKE/MULTI-RESIDENTIAL SPECIFIC

Credits	
1	Where the design team (or client) has appointed a suitably qualified ecologist to advise and report on enhancing and protecting the ecological value of the site; and implemented the professional's recommendations for general enhancement and protection of site ecology.
2	Where there is a positive increase in the ecological value of the site of up to (but not including) 6 species.
3	Where there is a positive increase in the ecological value of the site of 6 species or greater.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No
Second Credit achieved? (For full explanation, please refer to Validation Statement)	No
Third Credit achieved? (For full explanation, please refer to Validation Statement)	No

Validation Statement

These credits are not sought

Land Use & Ecology
LE6 – Long term impact on biodiversity

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To minimise the long term impact of the development on the sites, and surrounding areas, biodiversity.

Criteria

OFFICES/RETAIL/EDUCATION/COURTS/HEALTHCARE/INDUSTRIAL/BESPOKE/MULTI-RESIDENTIAL SPECIFIC

Credits	
1	The client has committed to achieving the mandatory requirements listed below and at least two of the additional requirements.
2	The client has committed to achieving the mandatory requirements listed below and at least four of the additional requirements.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No
Second Credit achieved? (For full explanation, please refer to Validation Statement)	No

Validation Statement

These credits are not sought

Pollution

Pollution
Pol 1 – Refrigerant GWP building services

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	1
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Aim

To reduce the contribution to climate change from refrigerants with a high global warming potential.

Criteria

Credits	
1	Where evidence provided demonstrates the use of refrigerants with a global warming potential (GWP) of less than 5 or where there are no refrigerants specified for use in building services.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.42 Email containing attachments Ref.43 MSZ-SF25VE2_PI_Sheet Ref.44 MSZ-SF35VE2_PI_Sheet Ref.45 MSZ-SF50VE2_PI_Sheet (2)	

Validation Statement

Ref.42 – Email contains attachments detailing the air conditioning units.

Ref.43-Ref.45 – Manufacturers literature for the specified air conditioning units confirms the charge to be less than 5kg and therefore the credit can be awarded.

Credit can be awarded

Pollution
Pol 2 – Preventing refrigerant leaks

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	1
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Aim

To reduce the emissions of refrigerants to the atmosphere arising from leakages in cooling plant.

Criteria

EDUCATION/PRISONS/INDUSTRIAL SPECIFIC

Credits	
1	Where evidence provided demonstrates that refrigerant leaks can be detected AND that the provision of automatic refrigerant pump down is made to a heat exchanger (or dedicated storage tanks) with isolation valves. Or where there are no refrigerants specified for the development.

Schedule of Evidence

<i>First Credit achieved? (For full explanation, please refer to Validation Statement)</i>	Yes
Ref.42 Email containing attachments Ref.43 MSZ-SF25VE2_PI_Sheet Ref.44 MSZ-SF35VE2_PI_Sheet Ref.45 MSZ-SF50VE2_PI_Sheet (2)	

Validation Statement

Ref.42 – Email contains attachments detailing the air conditioning units.

Ref.43-Ref.45 – Manufacturers literature for the specified air conditioning units confirms the charge to be less than 5kg and therefore the credit can be awarded.

Credit can be awarded

Pollution
Pol 4 – NO_x emissions from heating source

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To encourage the supply of heat from a system that minimises NO_x emissions, and therefore reduces pollution of the local environment.

Criteria

EDUCATION/PRISONS/HEALTHCARE SPECIFIC

Credits	
1	Where evidence provided demonstrates that the dry NO _x emissions from delivered space heating energy are ≤100 mg/kWh (at 0% excess O ₂).
2	Where evidence provided demonstrates that the dry NO _x emissions from delivered space heating energy are ≤70 mg/kWh (at 0% excess O ₂).
3	Where evidence provided demonstrates that the dry NO _x emissions from delivered space heating energy are ≤40 mg/kWh (at 0% excess O ₂) and emissions from delivered water heating energy are 100 mg/kWh or less (at 0% excess O ₂).

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No
Second Credit achieved? (For full explanation, please refer to Validation Statement)	No
Third Credit achieved? (For full explanation, please refer to Validation Statement)	No
No evidence provided	

Validation Statement

These credits are not sought.

Pollution
Pol 5 – Flood risk

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To encourage development in low flood risk areas, or to take measures to reduce the impact of flooding on buildings in areas with a medium or high risk of flooding.

Criteria

Credits	
2	Where evidence provided demonstrates that the assessed development is located in a zone defined as having a low annual probability of flooding.
1	Where evidence provided demonstrates that the assessed development is located in a zone defined as having a medium or high annual probability of flooding AND the ground level of the building, car parking and access is above the design flood level for the site's location.

One further credit is awarded as follows:

1	Where evidence provided demonstrates that surface water run-off attenuation measures are specified to minimise the risk of localised flooding, resulting from a loss of flood storage on site due to development.
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Schedule of Evidence

<i>First Credit achieved?</i> <i>(For full explanation, please refer to Validation Statement)</i>	No
<i>Second Credit achieved?</i> <i>(For full explanation, please refer to Validation Statement)</i>	No
<i>Third Credit achieved?</i> <i>(For full explanation, please refer to Validation Statement)</i>	No
Ref.192 853_BREEAM Pol 5_FRA_East Kent College, Broadstairs_Rev0 Ref.193 Pol 5 email	

Validation Statement

These credits are not sought

Pollution
Pol 6 – Minimising watercourse pollution

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To reduce the potential for silt, heavy metals, chemicals or oil pollution to natural watercourses from surface water run-off from buildings and hard surfaces.

Criteria

Credits	
1	Where evidence provided demonstrates that effective on site treatment such as Sustainable Drainage Systems (SUDs) or oil separators have been specified in areas that are or could be a source of watercourse pollution.

Schedule of Evidence

<i>First Credit achieved?</i> <i>(For full explanation, please refer to Validation Statement)</i>	No
No evidence provided	

Validation Statement

This credit is not sought.

Pollution
Pol 7 – Reduction of night time light pollution

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	1
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Aim

To ensure that external lighting is concentrated in the appropriate areas and that upward lighting is minimised, reducing unnecessary light pollution, energy consumption and nuisance to neighbouring properties.

Criteria

Credits	
1	Where evidence provided demonstrates that the external lighting design is in compliance with the guidance in the Institution of Lighting Engineers (ILE) Guidance notes for the reduction of obtrusive light, 2005.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	Yes
Ref.1 BREEAM Specification Richer Sounds Ref.46 Pol 7 photos email Ref.47 IMG_7958 Ref.48 IMG_7963 Ref.49 IMG_7974 Ref.50 Pol 7 email Ref.51 2270-TD-300-00 - proposed elevations with external lighting	

Validation Statement

Ref.1 - BREEAM Spec confirms the lighting standard will be met, that it will be switched off between 11pm-7am, and that there is no security lighting to be installed.

Ref.46 – Email received containing photos of the external lighting that will remain.

Ref.47 – Ref.49 - Photos received confirm the only external lighting is downlighting to the store sign.

Ref.50 – Email contains lighting drawing.

Ref.51 – Elevation drawings detail the external lighting.

One credit has been achieved.

Pollution
Pol 8 – Noise attenuation

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To reduce the likelihood of noise from the new development affecting nearby noise-sensitive buildings.

Criteria

Credits	
1	Where evidence provided demonstrates that new sources of noise from the development do not give rise to the likelihood of complaints from existing noise-sensitive premises and amenity or wildlife areas that are within the locality of the site.

Schedule of Evidence

First Credit achieved? (For full explanation, please refer to Validation Statement)	No

Validation Statement

This credit is not sought

Innovation

Innovation

Minimum BREEAM Standards					
Rating Level	P	G	VG	E	O
Min. credits to achieve rating	-	-	-	-	-

Number of credits achieved:	0
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Aim

To provide additional recognition for a procurement strategy, design feature, management process or technological development that innovates in the field of sustainability, above and beyond the level that is currently recognised and rewarded within standard BREEAM issues.

Criteria

A maximum of 10 credits are available in aggregate from any combination of the following:

Credits	
10	Up to ten credits (dependent on building type) are available where evidence provided demonstrates compliance with the Exemplary Performance levels for specific BREEAM issues.
2	Two credits are available where evidence provided demonstrates the use of a <i>BREEAM Accredited Professional</i> or <i>Suitably Qualified BREEAM Assessor</i> as an integral part of the design team.
10	Up to ten credits are available where evidence provided demonstrates the development and application of <i>Approved Innovations</i> .

Schedule of Evidence - Exemplary Performance Levels

BREEAM Issue for which there are exemplary performance levels	Credits Achieved
Man 2 - Considerate Constructors	0
Hea 1 - Daylighting	0
Hea 14 - Office Space (BREEAM Retail & Industrial Schemes only)	0
Ene 1 - Reduction of CO ₂ emissions	0
Ene 5 - Low or Zero Carbon Technologies	0
Wat 2 - Water Meter	0
Mat 1 - Materials Specification	0
Mat 5 - Responsible Sourcing of Materials	0

Wst 1 - Construction Site Waste Management	0
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For assessment reporting (evidence and validation) of the above BREEAM Issues, refer to each individual assessment of that issue within the relevant Building Performance section of this report.

Schedule of Evidence – BREEAM Accredited Professional/Suitably Qualified BREEAM Assessor

<i>First Credit achieved?</i> (For full explanation, please refer to Validation Statement)	No
<i>Second Credit achieved?</i> (For full explanation, please refer to Validation Statement)	No

Validation Statement– BREEAM Accredited Professional/Suitably Qualified BREEAM Assessor

These credits are not sought

Schedule of Evidence – Approved Innovations

No approved innovations have been sought.

<i>Innovation Credit achieved?</i> (For full explanation, please refer to Validation Statement)	No

Validation Statement – Approved Innovations

Appendices

List of References

- Ref.1 BREEAM Specification Richer Sounds
- Ref.2 Checklist A3 Construction Site Impacts completed
- Ref.3 Email that contains A3
- Ref.4 Oxford Road Reading TS Final Issue 1
- Ref.5 Tra 1 118a Oxford Road
- Ref.6 Bus 143 143A times
- Ref.7 Bus jet black map
- Ref.8 Bus jet black times
- Ref.9 Bus lime2 times
- Ref.10 Bus purple 17 map
- Ref.11 Bus purple 17 times
- Ref.12 Bus royal blue 33 map
- Ref.13 Bus royal blue 33 times
- Ref.14 Bus sky blue 15 map
- Ref.15 Bus sky blue 15 times
- Ref.16 Bus sky blue 16 map
- Ref.17 Bus sky blue 16 times
- Ref.18 Bus yellow 26 map
- Ref.19 Bus yellow 26 times
- Ref.20 BREEAM_UK_NC_2014_Tra01_Calculator_v2.0
- Ref.21 Tra 2 maps to amenities
- Ref.22 Wat 1 and 2 email
- Ref.23 WC1 GL1738WH
- Ref.24 B8263AA_DataSheet_avon21washbasin1holemixervariabletempcontrolflexitails
- Ref.25 2008_Wat_1_calculator_rev02
- Ref.26 2270-TD-202-00
- Ref.27 2270-TD-200-00 ground floor plan + proposed water meter location

Ref.28 Wat 2 email

Ref.29 Jet Range Water Meter

Ref.30 15-035-15 30-05-17 - RAA to SHW - BREEAM materials

Ref.31 2270-TD-100-00 + waste storage arrangements

Ref.32 Email confirms waste streams

Ref.33 Email confirms labelling

Ref.34 Wst 3 email

Ref.35 15-035-15 30-05-17 - RAA to SHW - BREEAM LE Credits

Ref.36 Oxford Road Reading TS Final Issue 1

Ref.37 2270-TD-010-00

Ref.38 2270-TD-100-00

Ref.39 Checklist A4 completed

Ref.40 Email confirms areas

Ref.41 2008_LE4_and_LE5_calculator_rev01_Final

Ref.42 Email containing attachments

Ref.43 MSZ-SF25VE2_PI_Sheet

Ref.44 MSZ-SF35VE2_PI_Sheet

Ref.45 MSZ-SF50VE2_PI_Sheet (2)

Ref.46 Pol 7 photos email

Ref.47 IMG_7958

Ref.48 IMG_7963

Ref.49 IMG_7974

Ref.50 Pol 7 email

Ref.51 2270-TD-300-00 - proposed elevations with external lighting

BREEAM Assessment Tool and Calculator Print-Outs