

BREEAM New Construction 2014

Pre Assessment Report for planning application

Client: CPL Architects

Project: The Gate
553 Oxford Road

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SECTION 1- What is BREEAM?

BREEAM (Building Research Establishment's Environmental Assessment Method) is the world's leading and most widely used environmental assessment method for buildings, with over 115,000 buildings certified and nearly 700,000 registered. 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. Credits are awarded in ten categories according to performance. These credits are then added together to produce a single overall score on a scale of Pass, Good, Very Good, Excellent and Outstanding. The operation of BREEAM is overseen by an independent Sustainability Board, representing a wide cross-section of construction industry stakeholders.

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
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SECTION 2- Scope

Non-domestic BREEAM schemes can be used to assess the environmental impacts of a building in accordance with this scope document in England, Scotland, Wales and Northern Ireland. Assessments using UK BREEAM schemes can also be carried out in the Republic of Ireland, but it must be recognised that BREEAM is tailored to the UK's construction sector. No concessions are made in the schemes where the Republic of Ireland building standards and design and procurement practices differ from those in the UK.

The BREEAM New Construction scheme can be used to assess the environmental life cycle impacts of new non-domestic buildings at the design and construction stages. 'New Construction' is defined as development that results in a new standalone structure, or new extension to an existing structure, which will come into operation/use for the first time upon completion of the works. This BREEAM 2014 New Construction scheme is applicable to new non-domestic buildings in the United Kingdom only.

In terms of the application of the New Construction scheme, non-domestic buildings are defined in BREEAM as either standard or non-standard types. The standard type category includes buildings listed above against the commercial, public (non-housing) and multi-residential sectors. These are building types which BREEAM New Construction is specifically designed to assess and the assessment criteria tailored for. This standard category includes building types that in the past would have had their own stand-alone BREEAM scheme document, such as Offices, Retail, Industrial, Education, Healthcare, Multi-residential and so on.

Non-standard building types are those listed against the 'other buildings' sector and includes many types of building that, under previous version of BREEAM, would have been classified and assessed using the BREEAM Bespoke scheme. The non-standard building types listed against the 'other buildings' category now fall within the scope of the BREEAM 2014 New Construction scheme and therefore do not require separate tailored assessment criteria.

The BREEAM UK New Construction 2014 version can be applied to both complex and less complex building projects. This section provides guidance to assessors and project teams on the application of BREEAM to less complex i.e. simple building projects.

A Simple Building is defined as one where the building services are predominantly of limited capacity and local in their delivery, largely independent of other systems in the building fabric and avoid complex control systems.

Where the building includes complex services, systems or functions/facilities including, but not limited to those listed below, it cannot be defined or assessed as a Simple Building and a full BREEAM UK New Construction 2014 assessment should be carried out:

- Air-conditioning (with the exception of local split cooling systems, see Building Services section).
 - Full mechanical ventilation, displacement ventilation, and complex passive ventilation (see Building Services section for guidance on permitted systems).
 - Renewable energy sources, with the exception of on-site micro-generation technologies¹ or connection to existing community / district heating or cooling systems.
 - Laboratories and buildings that contain either fume cupboards and/or safety cabinets and/or containment areas.
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- Major water-consuming plant or functions such as swimming/hydrotherapy/research pools and/or vehicle wash/irrigation systems.
- Cold storage plant and enclosures, with the exception of domestic scale refrigeration
- Escalators and/or travelling walkways.

The list above is not exhaustive, but serves to indicate the types of services and systems that describe a more complex building solution and therefore would not be present within a simple building. Examples of buildings which could fall under the BREEAM UK New Construction definition of Simple Building (depending on the remit of the works) include: offices, educational and community buildings, GP surgeries, basic industrial units, and extensions to existing buildings.

SECTION 3- Scoring & Rating

There are a number of elements that determine the BREEAM rating; these are as follows:

- BREEAM rating benchmarks
- BREEAM environmental weightings
- Minimum BREEAM standards
- BREEAM credits for Innovation

Each of these elements is described in the BREEAM 2014 new Construction Assessor manual; this includes guidance and examples describing how a BREEAM rating is calculated.

In addition, there are sections describing the conditions that must be met in order to award an assessed building a 'BREEAM Outstanding' rating, the highest achievable BREEAM rating.

Rating Benchmarks

The rating benchmarks for the 2014 version of BREEAM are outlined in table 2 below:

Table 2 BREEAM 2014 rating benchmarks

BREEAM RATING	% SCORE
UNCLASSIFIED	<30
PASS	≥30
GOOD	≥45
V GOOD	≥55
EXCELLENT	≥70
OUTSTANDING*	≥85

* Please note: there are additional criteria for achieving a BREEAM Outstanding rating. Please refer to the guidance below.

BREEAM issues and credits

Tradable BREEAM issues

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

Minimum BREEAM 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 or 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 for a Simple Building are as follows:

Section	Available	
	Credits	Percent
Management	12	12%
Health and Wellbeing	12	15%
Energy	20	15%
Transport	8	9%
Water	8	7%
Materials	14	13.5%
Waste	8	8.5%
Land Use and Ecology	8	10%
Pollution	9	10%
Innovation	10	10%
Total	109	110.00%

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.

The following section describes some of the additional features a Simple Building may have. These descriptions can be used to support the classification of a building for the purpose of a BREEAM Simple Building Assessment.

Issue ID	Criteria Applicable to Simple Buildings			Credits available	Exemplary credits available
	No Change	Simplified	N/A		
Management					
Man 01		✓		2	2
Man 02		✓		1	0
Man 03		✓		4	2
Man 04		✓		2	0
Man 05	✓			3	0
Health and Wellbeing					
Hea 01	✓			(3 to 6) building type dependent	1
Hea 02		✓		(2 to 3) building type dependent	2
Hea 03			✓	N/A	N/A
Hea 04	✓			3	0
Hea 05			✓	N/A	N/A
Hea 06	✓			2	0
Energy					
Ene 01	✓			12	5
Ene 02	✓			(1 to 2) building type dependent	0
Ene 03	✓			1	0
Ene 04	✓			3	0
Ene 05			✓	N/A	N/A
Ene 06	✓			2	0
Ene 07			✓	N/A	N/A
Ene 08	✓			2	0
Ene 09	✓			1	0
Transport					
Tra 01	✓			(Up to 5) building type dependent	0
Tra 02	✓			(1 to 2) building type dependent	0
Tra 03	✓			(1 to 3) building type dependent	0
Tra 04			✓	N/A	N/A
Tra 05			✓	N/A	N/A
Water					
Wat 01	✓			5	1
Wat 02		✓		1	0
Wat 03		✓		2	0
Wat 04			✓	N/A	N/A

Materials					
Mat 01	✓			(Up to 6) building type dependent	3
Mat 02	✓			1	0
Mat 03	✓			4	1
Mat 04	✓			1	0
Mat 05	✓			1	0
Mat 06	✓			1	0
Waste					
Wst 01		✓		4	1
Wst 02	✓			1	1
Wst 03	✓			1	0
Wst 04	✓			1	0
Wst 05	✓			1	1
Wst 06	✓			1	0
Land Use and Ecology					
LE 01	✓			2	0
LE 02	✓			2	0
LE 03	✓			2	0
LE 04		✓		2	0
LE 05			✓	N/A	N/A
Pollution					
Pol 01			✓	N/A	N/A
Pol 02	✓			(1 to 3) building type dependent	0
Pol 03		✓		5	1
Pol 04	✓			1	0
Pol 05			✓	N/A	N/A

SECTION 4- BREEAM Pre Assessment

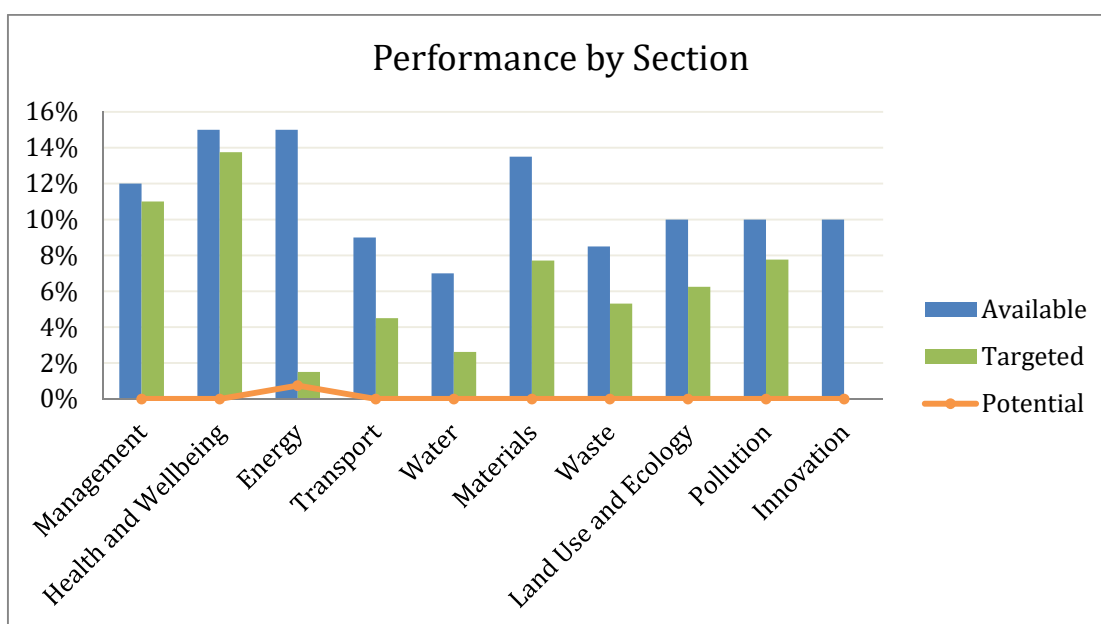
A BREEAM New Construction 2014 credit assessment has been completed by a licenced BREEAM Assessor on behalf of MES Building Solutions. The results suggest that a score of 60.4% (Very Good) is achievable with the current assumed specification and design.

The Pre-Assessment score summary can be seen below:

Overall Building Performance

Project name	The Gate, 553 Oxford Road
BREEAM Scheme	New Construction 2014 (Simple Buildings)
Assessment Type	Fully Fitted
BREEAM rating	Very Good
Total score	60.4%
Min. standards level achieved	Very Good Level

Section	Available		Targeted		Potential	
	Credits	Percent	Credits	Percent	Credits	Percent
Management	12	12%	11	11.00%	0	0%
Health and Wellbeing	12	15%	11	13.75%	0	0%
Energy	20	15%	2	1.50%	1	0.75%
Transport	8	9%	4	4.50%	0	0%
Water	8	7%	3	2.62%	0	0%
Materials	14	13.5%	8	7.71%	0	0%
Waste	8	8.5%	5	5.31%	0	0%
Land Use and Ecology	8	10%	5	6.25%	0	0%
Pollution	9	10.0%	7	7.77%	0	0%
Innovation	10	10%	0	0%	0	0%
Total	109	110.00%	56	60.40%	1	0.75%



A breakdown of the credits assessed as being achievable can be seen in the table on the following pages.

Credits assumed as achieved are shown in column 4, while those assessed as being potential additional credits are shown in **green** in column 5.

The relevant BREEAM 2014 New Construction Manual (Issue 1.0) page reference numbers are shown in the column 6 on the right.

Pre- Assessment Estimation					
Issue	Description	Credits			Page No.
		Available	Targeted	Potential	
Man1	Project Brief & Design	2	2	0	38
Man 2	Life cycle costing & life cycle planning	1	1	0	44
Man 3	Responsible construction practices	4	3	0	49
Man 4	Commissioning & Handover	2	2	0	56
Man 5	Aftercare	3	3	0	62
Management Total		12	11	0	

Hea 1	Visual comfort	4	3	0	62
Hea 2	Indoor air quality	3	3	0	78
Hea 3	Safe containment of laboratories	N/A	N/A	N/A	91
Hea 4	Thermal comfort	3	3	0	95
Hea 5	Acoustic performance	N/A	N/A	N/A	102
Hea 6	Safety & security	2	2	0	116
Health & Wellbeing Total		12	11	0	
Ene 1	Reduction in CO ₂ Emissions	12	0	0	133
Ene 2	Energy monitoring	2	1	0	145
Ene 3	External Lighting	1	1	0	152
Ene 4	Low Zero Carbon design	3	0	1	155
Ene 5	Energy efficient cold storage	N/A	N/A	N/A	164
Ene 6	Energy efficient transportation system	N/A	N/A	N/A	168
Ene 7	Energy efficient laboratory systems	N/A	N/A	N/A	172
Ene 8	Energy efficient equipment	2	0	0	178
Ene 9	Drying space	N/A	N/A	N/A	185
Energy Total		20	2	1	
Tra 1	Public transport accessibility	5	2	0	189
Tra 2	Proximity to Amenities	1	1	0	196
Tra 3	Cyclists Facilities	2	1	0	200
Tra 4	Max car parking capacity	N/A	N/A	N/A	209
Tra 5	Travel plan	N/A	N/A	N/A	216
Transport Total		8	4	0	

Wat 1	Water consumption	5	2	0	220
Wat 2	Water monitoring	1	0	0	231
Wat 3	Water leak detection & prevention	2	1	0	235
Wat 4	Water efficient equipment	N/A	N/A	N/A	239
Water Total		8	3	0	
Mat 1	Lifecycle impacts	6	2	0	243
Mat 2	Hard landscaping and boundary protection	1	1	0	259
Mat 3	Responsible Sourcing	4	2	0	262
Mat 4	Insulation	1	1	0	273
Mat 5	Designing for durability & resilience	1	1	0	277
Mat 6	Material efficiency	1	1	0	281
Materials Total		14	8	0	
Wst 1	Construction waste management	4	2	0	286
Wst 2	Recycled aggregates	1	0	0	294
Wst 3	Operational waste	1	1	0	296
Wst 4	Speculative floor & ceiling finishes	N/A	N/A	N/A	304
Wst 5	Adaption to climate change	1	1	0	306
Wst 6	Functional adaptability	1	1	0	310
Waste Total		8	5	0	

Le 1	Site selection	2	1	0	314
Le 2	Ecological value of site & protection of ecological features	2	2	0	318
Le 3	Minimising impact on existing site ecology	2	1	0	324
Le 4	Enhancing site Ecology	2	1	1	332
Le 5	Long term impact on biodiversity	N/A	N/A	N/A	337
Land Use & Ecology Total		8	5	0	
Pol 1	Impact of refrigerants	N/A	N/A	N/A	343
Pol 2	NOx emissions	3	2	0	351
Pol 3	Surface water run-off	5	4	0	358
Pol 4	Reduction of night time light pollution	1	1	0	375
Pol 5	Noise attenuation	N/A	N/A	N/A	378
Pollution Total		9	7	0	
Innovation Total		10	0	0	

Appendix:

BREEAM Calculator Tool Output

Building name	The Gate
Building score (%)	60.40%
Building rating	Very Good
Minimum standards level achieved	Very Good level

MANAGEMENT**Man 01 Project brief and design**

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	2	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Stakeholder consultation (project delivery)	Yes	1	1
Stakeholder consultation (third party)	Yes	1	1
Exemplary level : Accredited sustainability Champion (design)	No	1	0
Exemplary level: Accredited sustainability Champion (monitoring progress)	No	1	0

Total BREEAM credits achieved	2
Total contribution to overall building score	2.00%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Man 02 Life cycle cost and service life planning

No. of BREEAM credits available	1	Available contribution to overall score	1.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria			
Capital cost reporting	Yes	1	1
Capital cost of the project		£/m ²	
Total BREEAM credits achieved	1		
Total contribution to overall building score	1.00%		
Total BREEAM innovation credits achieved	0		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Man 03 Responsible construction practices

No. of BREEAM credits available	4	Available contribution to overall score	4.00%
No. of BREEAM innovation credits available	2	Minimum standards applicable	Yes

Assessment Criteria	Compliant?	Credits available	Credits achieved
All site timber & timber based products is 'legally harvested & traded timber'	Yes		
Environmental management (criteria 2-3)	Yes	1	1
Considerate construction (criterion 7)	1	2	1
Monitoring of construction impacts (criterion 8)	Yes		
Utility consumption (water and energy)	Yes	1	1
Exemplary level performance (transport of construction material and waste)	No	1	0
Exemplary level criteria (criterion 18)			

Key Performance Indicators: Construction site energy use

Energy consumption (total) - site processes		Information not available at design stage
Energy consumption (intensity) - site processes		Information not available at design stage

Key Performance Indicators: Construction site greenhouse gas emissions

Process greenhouse gas emissions (total) - site processes		Information not available at design stage
Greenhouse gas emissions (intensity) - site processes		Information not available at design stage

Key Performance Indicators: Construction site use of freshwater resources

Use of freshwater resource (total) - site processes		Information not available at design stage
Use of freshwater resource (intensity) - site processes		Information not available at design stage

Total BREEAM credits achieved	3
Total contribution to overall building score	3.00%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Excellent level

Assessor comments/notes:

Man 04 Commissioning and handover

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Commissioning schedule and responsibilities (criteria 2-4)	Yes	1	1
Handover - Building User Guide (criterion 10)	Yes	1	1
Handover - Training schedule (criterion 11)	Yes		

Total BREEAM credits achieved	2
Total contribution to overall building score	2.00%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Man 05 Aftercare

No. of BREEAM credits available	3	Available contribution to overall score	3.00%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Assessment Criteria	Compliant?	Credits available	Credits achieved
Aftercare support (criteria 1-2)	Yes	1	1
Seasonal commissioning (criterion 3)	Yes	1	1
Post occupancy evaluation (criteria 4-5)	Yes	1	1
Exemplary level performance (criterion 6)		1	0

Total BREEAM credits achieved	3
Total contribution to overall building score	3.00%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

HEALTH & WELLBEING

Hea 01 Visual comfort

No. of BREEAM credits available	4	Available contribution to overall score	5.00%
No. of BREEAM innovation credits available	1	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Glare control	Yes	1	1
Daylighting (Building type dependant)	0	1	0
View out	Yes	1	1
Internal and external lighting levels, zoning and controls	Yes	1	1
Exemplary level performance - daylighting	No	1	0

Total BREEAM credits achieved	3
Total contribution to overall building score	3.75%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Hea 02 Indoor air quality

No. of BREEAM credits available	3	Available contribution to overall score	3.75%
No. of BREEAM innovation credits available	2	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Ventilation (Criteria 2-3)	Yes	1	1
VOCs (products) (criteria 6-7)	Yes	1	1
Adaptability - potential for natural ventilation (criteria 13-14)	Yes	1	1
Exemplary level performance (criteria 15-20)	0	2	0

Total BREEAM credits achieved	3
Total contribution to overall building score	3.75%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Hea 04 Thermal comfort

No. of BREEAM credits available	3	Available contribution to overall score	3.75%
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Thermal modelling	Yes	1	1
Adaptability - for a projected climate change scenario	Yes	1	1
Thermal zoning and control strategy	Yes	1	1

Key Performance Indicators: Thermal comfort

Predicted Mean Vote (PMV)	
Predicted Percentage Dissatisfied (PPD)	

Key Performance Indicators: Adaptability - for a projected climate scenario

Predicted Mean Vote (PMV)	
Predicted Percentage Dissatisfied (PPD)	

Total BREEAM credits achieved	3
Total contribution to overall building score	3.75%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Hea 06 Safety and security

No. of BREEAM credits available	2	Available contribution to overall score	2.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Safe external access	Yes	1	1
Security of site and building	Yes	1	1

Total BREEAM credits achieved	2
Total contribution to overall building score	2.50%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

ENERGY

Ene 01 Reduction of energy use and carbon emissions

No. of BREEAM credits available	12	Available contribution to overall score	9.00%
No. of BREEAM innovation credits available	5	Minimum standards applicable	Yes

Ene 01 Calculator

Country of the UK where the building is located	England	Confirm building regulation and version used:	England Part L2A 2013
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Building floor area	493	m2
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Notional building heating and cooling energy demand	56.07	MJ/m2yr	
Actual building heating and cooling energy demand	59.91	MJ/m2yr	
Notional building primary energy consumption	115.89	kWh/m2yr	
Actual building primary energy consumption	181.86	kWh/m2yr	
Target Emission Rate (TER)	20.20	kgCO2/m2yr	45.00
Building Emission Rate (BER)	20.10	kgCO2/m2yr	41.00
Building Emission Rate improvement over TER	0.5%		
Heating & cooling demand Energy Performance Ratio (EPR _{ED})	0.000		
Primary consumption Energy Performance Ratio (EPR _{PC})	0.000		
CO ₂ Energy Performance Ratio (EPR)	0.007		
CO ₂ Energy Performance Ratio (EPR _{CO2})	0.007		

Where specified, please confirm the energy production from onsite or near site energy generation technologies	
Equivalent % of the building's 'regulated' energy consumption generated by carbon neutral sources and used to meet energy demand from 'unregulated' building systems or processes?	
Is the building designed to be 'carbon negative'?	
If the building is defined as 'carbon negative' what is the total (modelled) renewable/carbon neutral energy generated and exported	

Total BREEAM credits achieved	0
Total contribution to overall building score	0.00%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Very Good level

Assessor comments/notes:

Ene 02 Energy monitoring

No. of BREEAM credits available	2	Available contribution to overall score	1.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Sub-metering of major energy consuming systems	Yes	1	1
Sub-metering of high energy load and tenancy areas	No	1	0

Total BREEAM credits achieved	1
Total contribution to overall building score	0.75%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Ene 03 External lighting

No. of BREEAM credits available	1	Available contribution to overall score	0.75%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
External lighting specification	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	0.75%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Ene 04 Low carbon design

No. of BREEAM credits available	3	Available contribution to overall score	2.25%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Passive design analysis	No	1	0
Free cooling	No	1	0
Low and zero carbon technologies	No	1	0

Total BREEAM credits achieved	0
Total contribution to overall building score	0.00%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Ene 06 Energy efficient transportation systems

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Assessment Criteria	Compliant?	Credits available	Credits achieved
Total BREEAM credits achieved	N/A		
Total contribution to overall building score	N/A		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Ene 08 Energy efficient equipment

No. of BREEAM credits available	2	Available contribution to overall score	1.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

	Present?	Major impact?
Ref A Small power and plug in equipment		
Ref C Communal laundry		
Ref D Data centre		
Ref E IT-intensive operation areas		
Ref F Residential areas		
Ref G Healthcare		
Ref H Kitchen and catering facilities		

	Compliant	Credits available	Credits achieved
Significant majority contributors BREEAM compliant	No	2	0
Total BREEAM credits achieved		0	
Total contribution to overall building score		0.00%	
Total BREEAM innovation credits achieved		N/A	
Minimum standard(s) level		N/A	

Assessor comments/notes:

Ene 09 Drying space**Assessment Issue Not Applicable**

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Total BREEAM credits achieved		N/A	
Total contribution to overall building score		N/A	
Total BREEAM innovation credits achieved		N/A	
Minimum standard(s) level		N/A	

Assessor comments/notes:

TRANSPORT

Tra 01 Public transport accessibility

No. of BREEAM credits available	5	Available contribution to overall score	5.63%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Building type category (for purpose of Tra01 issue assessment)	Other Building Type 2
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Assessment Criteria	Compliant	Credits available	Credits achieved
Public transport accessibility index	6.00	5	2
Building dedicated bus service			N/A
Total BREEAM credits achieved	2		
Total contribution to overall building score	2.25%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Tra 02 Proximity to amenities

No. of BREEAM credits available	1	Available contribution to overall score	1.13%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Close proximity and accessible to applicable amenities	Yes	1	1
Total BREEAM credits achieved	1		
Total contribution to overall building score	1.13%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Tra 03 Cyclist facilities

No. of BREEAM credits available	2	Available contribution to overall score	2.25%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Building type category (for purpose of Tra03 issue assessment)	Other Building - transport type 1
Number of compliant cycle storage spaces provided	6
Cyclist facilities types provided	No compliant facilities

Assessment Criteria	Compliant?	Credits available	Credits achieved
Cycle storage spaces	Yes	2	1
Cyclist facilities	No		

Does the assessed building comply with CN2.2?	No
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Total BREEAM credits achieved	1
Total contribution to overall building score	1.13%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

WATER

Wat 01 Water consumption

No. of BREEAM credits available	5	Available contribution to overall score	4.38%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Please select the calculation procedure used	Standard approach
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Standard approach data

Water Consumption from building micro-components	0.00	L/person/day
Water demand met via greywater/rainwater sources	0.00	L/person/day
Total net water consumption	120.00	L/person/day
Improvement on baseline performance	25.00%	%

Key Performance Indicator - use of freshwater resource

Total net Water Consumption		m3/person/yr
Default building occupancy		

Alternative approach data

Overall microcomponent performance level achieved	

Total BREEAM credits achieved	2
Total contribution to overall building score	1.75%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Wat 02 Water monitoring

No. of BREEAM credits available	1	Available contribution to overall score	0.88%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Water meter on the mains water supply to the building(s)	Yes	1	0
Metering/monitoring equipment on supply to plant/building areas	No		
Pulsed output on all relevant water meters	No		
Existing BMS connection	N/A		

Total BREEAM credits achieved	0
Total contribution to overall building score	0.00%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Wat 03 Water leak detection and prevention

No. of BREEAM credits available	2	Available contribution to overall score	1.75%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Leak detection on main water supply OR flow valves installed at relevant locations	No	1	0
Flow control device to each sanitary area/facility	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	0.88%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

MATERIALS**Mat 01 Life cycle impacts**

No. of BREEAM credits available	6	Available contribution to overall score	5.79%
No. of BREEAM innovation credits available	3	Minimum standards applicable	No

Assessment Criteria

Total Mat01 credits achieved	2
Total Mat01 points achieved	1.00
Number of building elements assessed	3
Exemplary level compliant?	No
Has IMPACT compliant software been used?	No

Key Performance Indicator - embodied green house gas emissions by element	Total area of element m ²	Total impact kgCO ₂ eq.	Area of element impact data relevant to m ²
External walls			
Windows			
Roof			
Upper floor construction			
Internal wall			
Floor finishes/coverings			

Key Performance Indicator - embodied green house gas emissions for building (assessed elements only)

Total embodied green house gas emissions for building (by assessed elements)	Missing data	kgCO ₂ eq.		kgCO ₂ eq./m ²
Proportion of applicable building elements that data reported covers				

Total BREEAM credits achieved	2
Total contribution to overall building score	1.93%

Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Mat 02 Hard landscaping and boundary protection

No. of BREEAM credits available	1	Available contribution to overall score	0.96%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
External hard landscaping and boundary protection	Yes	1	1
Total BREEAM credits achieved	1		
Total contribution to overall building score	0.96%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Mat 03 Responsible sourcing

No. of BREEAM credits available	4	Available contribution to overall score	3.86%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Assessment Criteria	Compliant	Credits available	Credits achieved
All timber/timber based products are 'Legally harvested and trader timber'	Yes		
Is there a documented sustainable procurement plan?	Yes	1	1
Percentage of available responsible sourcing points achieved	20.00%	3	1

Please confirm the route used to assess Mat03	Route 1: Lowest RSCS point score		
Total BREEAM credits achieved	2		
Total contribution to overall building score	1.93%		
Total BREEAM innovation credits achieved	0		
Minimum standard(s) level	Outstanding level		

Assessor comments/notes:

Mat 04 insulation

No. of BREEAM credits available	1	Available contribution to overall score	0.96%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Embodied impact - insulation index	2.50	1	1
Total BREEAM credits achieved	1		
Total contribution to overall building score	0.96%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Mat 05 Designing for durability and resilience

No. of BREEAM credits available	1	Available contribution to overall score	0.96%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Protecting vulnerable parts of the building from damage	Yes	1	1
Protecting exposed parts of the building from material degradation	Yes		
Total BREEAM credits achieved	1		
Total contribution to overall building score	0.96%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Mat 06 Material Efficiency

No. of BREEAM credits available	1	Available contribution to overall score	0.96%
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Material efficiency measures identified, investigated and implemented during all stages	Yes	1	1
Total BREEAM credits achieved	1		
Total contribution to overall building score	0.96%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

WASTE

Wst 01 Construction waste management

No. of BREEAM credits available	4	Available contribution to overall score	4.25%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Assessment Criteria	Compliant?
Construction resource efficiency (criteria 9 only)	Yes
Construction resource efficiency (criteria 10 and 11)	No
Diversion from landfill (criteria 4 and 5)	Yes
Exemplary level credit (criteria 12-14)	No

Key Performance Indicators - Construction Waste

Measure/units for the data being reported		
Non-hazardous construction waste (excluding demolition/excavation)		FALSE
Total non-hazardous construction waste generated		FALSE
Non-hazardous non-demolition const. waste diverted from landfill	%	
Total non-hazardous non-demolition const. waste diverted from landfill		FALSE
Total non-hazardous demolition waste generated		FALSE
Non-hazardous demolition waste diverted from landfill	%	
Total non-hazardous demolition waste to disposal	INA	FALSE
Material for reuse		FALSE
Material for recycling		FALSE
Material for energy recovery		FALSE
Hazardous waste to disposal		FALSE

Total BREEAM credits achieved	2
Total contribution to overall building score	2.13%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Wst 02 Recycled aggregates

No. of BREEAM credits available	1	Available contribution to overall score	1.06%
No. of BREEAM innovation credits available	1	Minimum standards applicable	No

Assessment Criteria

Total

Total % of high-grade aggregate that is recycled/secondary aggregate	0%
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% of high-grade aggregate that is recycled/secondary aggregate - by application

Structural frame	
Bitumen/hydraulically bound base, binder and surface courses for paved areas and roads	
Building foundations	
Concrete road surfaces	
Pipe bedding	
Granular fill and capping	

Total BREEAM credits achieved	0
Total contribution to overall building score	0.00%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Wst 03 Operational waste

No. of BREEAM credits available	1	Available contribution to overall score	1.06%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Assessment Criteria

Compliant?

Credits available

Credits achieved

Segregation and storage of operational recyclable waste volumes	Yes	1	1
Static waste compactor(s) or baler(s)			
Vessel(s) for composting suitable organic waste			

Total BREEAM credits achieved	1
Total contribution to overall building score	1.06%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Wst 04 Speculative floor and ceiling finishes

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Assessment Criteria	Compliant?	Credits available	Credits achieved
Please select			

Total BREEAM credits achieved	N/A
Total contribution to overall building score	N/A
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Wst 05 Adaptation to climate change

No. of BREEAM credits available	1	Available contribution to overall score	1.06%
No. of BREEAM innovation credits available	1	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Adaptation to climate change – structural and fabric resilience	Yes	1	1
Exemplary performance level: Responding to adaptation to climate change	No	1	0

Total BREEAM credits achieved	1
Total contribution to overall building score	1.06%
Total BREEAM innovation credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Wst 06 Functional adaptability

No. of BREEAM credits available	1	Available contribution to overall score	1.06%
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Functional adaptability (criteria 1-2)	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	1.06%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

LAND USE & ECOLOGY

LE 01 Site selection

No. of BREEAM credits available	2	Available contribution to overall score	2.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
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Previously occupied land	Yes	1	1
	No	1	0
Contaminated land			
Total BREEAM credits achieved		1	
Total contribution to overall building score		1.25%	
Total BREEAM innovation credits achieved		N/A	
Minimum standard(s) level		N/A	

Assessor comments/notes:

LE 02 Ecological value of site and protection of ecological features

No. of BREEAM credits available	2	Available contribution to overall score	2.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Ecological value of the land defined using	A Suitably Qualified Ecologist
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Assessment Criteria	Compliant?	Credits available	Credits achieved
Land of low ecological value	Yes	1	1
Protection of ecological features	Yes	1	1
Total BREEAM credits achieved	2		
Total contribution to overall building score	2.50%		
Total BREEAM innovation credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

LE 03 Minimising impact on existing site ecology

No. of BREEAM credits available	2	Available contribution to overall score	2.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Data sourced for calculating the change in ecological value from	Suitably Qualified Ecologist site survey of plant species
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Assessment Criteria	Change in ecological value	Plant species richness
	-1.00	
Total BREEAM credits achieved	1	
Total contribution to overall building score	1.25%	
Total BREEAM innovation credits achieved	N/A	
Minimum standard(s) level	Outstanding level	

Assessor comments/notes:

LE 04 Enhancing site ecology

No. of BREEAM credits available	2	Available contribution to overall score	2.50%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Has local expertise and guidance been used? (criterion 7)	No		
Suitably Qualified Ecologists appointment (SQE)	Yes	2	1
Ecologist's report and recommendations (criteria 1-3)	Yes		
Increase in ecological value (criteria 4-6)	0		

Plant species richness

Total BREEAM credits achieved	1
Total contribution to overall building score	1.25%
Total BREEAM innovation credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

POLLUTION

Pol 02 NO_x emissions

No. of BREEAM credits available	3	Available contribution to overall score	3.33%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

NOx emission level - space heating and, if applicable, hot water	45.00	mg/kWh
NOx emission level - cooling (where applicable)		mg/kWh
Does this building meet BREEAM's definition of a highly insulated building?		
Energy consumption: heating and hot water		kWh/m2 yr
Total BREEAM credits achieved	2	
Total contribution to overall building score	2.22%	
Total BREEAM innovation credits achieved	N/A	
Minimum standard(s) level	N/A	

Assessor comments/notes:

Pol 03 Surface water run-off

No. of BREEAM credits available	5	Available contribution to overall score	5.56%
No. of BREEAM innovation credits available	1	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Annual probability of flooding	Low	2	2
Flood Risk Assessment	Yes		
SWRO: decreased impermeable area (A) or source control (B) (criterion 23)		2	0
SWRO: no increase impermeable area (A) or increase in impermeable area (B) (criterion 24)	B	1	1
Minimising watercourse pollution(criteria 15 to 22)	Yes	1	1
Exemplary level (criteria 4 to 14)	No	1	0
Total BREEAM credits achieved		4	
Total contribution to overall building score		4.44%	
Total BREEAM innovation credits achieved		0	
Minimum standard(s) level		N/A	

Assessor comments/notes:

Pol 04 Reduction of night time light pollution

No. of BREEAM credits available	1	Available contribution to overall score	1.11%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
External lighting specification	Yes	1	1
Total BREEAM credits achieved		1	
Total contribution to overall building score		1.11%	
Total BREEAM innovation credits achieved		N/A	
Minimum standard(s) level		N/A	

Assessor comments/notes:

INNOVATION

Inn 01 Innovation

No. of BREEAM innovation credits available	10	Available contribution to overall score	10.00%
		Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Man 01 Project brief and design	No	2	0
Man 03 Responsible construction practices	No	2	0
Man 05 Aftercare	No	1	0
Hea 01 Visual comfort	No	1	0
Hea 02 Indoor air quality	No	2	0
Ene 01 Reduction of energy use and carbon emissions	No	5	0
Wat 01 Water consumption	No	1	0
Mat 01 Life cycle impacts	No	1	0
Mat 03 Responsible sourcing	No	4	0
Wst 01 Construction waste management	No	1	0
Wst 02 Recycled aggregates	No	1	0
Wst 05 Adaptation to climate change	No	1	0
Pol 03 Surface water run-off	No	1	0
Number of 'approved' innovation credits achieved?			0
Total BREEAM innovation credits achieved		0	
Total contribution to overall building score		0.00%	
Minimum standard(s) level		N/A	

Assessor comments/notes:

