



BREEAM Pre-Assessment

40 Silver Street Housing Reading

PR7877

Date: 14/04/2020



27-31 High Street
Kidlington, OX5 2DH

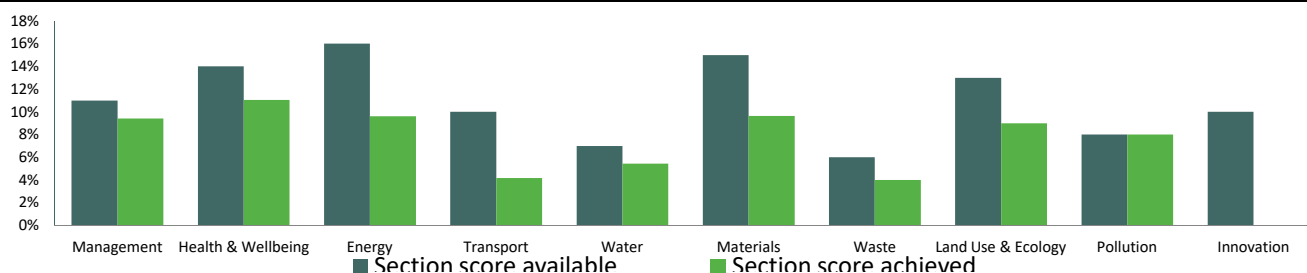
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BREEAM UK New Construction 2018 Assessment Report: Rating & Key Performance Indicators

Overall Building Performance

Building name	Silver Street Student Housing
BREEAM rating	Excellent
Total Score	70.30%
Min. standards level achieved	Excellent level

Building Performance by Environment Section



Environmental Section	No. credits available	No. credits Achieved	% credits achieved	Section Weighting	Section Score
Management	21	18	85.71%	11.00%	9.42%
Health & Wellbeing	19	15	78.95%	14.00%	11.05%
Energy	20	12	60.00%	16.00%	9.60%
Transport	12	5	41.67%	10.00%	4.16%
Water	9	7	77.78%	7.00%	5.44%
Materials	14	9	64.29%	15.00%	9.64%
Waste	9	6	66.67%	6.00%	4.00%
Land Use & Ecology	13	9	69.23%	13.00%	9.00%
Pollution	12	12	100.00%	8.00%	8.00%
Innovation	10	0	0.00%	10.00%	0.00%

Building Performance by Key Environmental Performance Indicator

Energy (consumption/production)	Life cycle stage	Measurement	Intensity	Units	Total	Units
Building operation ^[1]	Use	Modelled	50.00	kWh/m ² /yr	120600	kWh/yr
Energy production ^[2]	Use	Modelled	INA	kWh/m ² /yr	INA	kWh/yr
Construction process ^[3]	INA	INA	INA	INA	INA	INA

Carbon dioxide Emissions

BREEAM UK 2018 technical manual issue number

Building operation ^[1]	Use	Modelled	INA	kgCO ₂ eq/m ² /yr	INA	kgCO ₂ eq/yr
Construction process ^[3]	INA	INA	INA	INA	INA	INA
Transport ^[4]	INA	INA	INA	INA	INA	INA
Direct GHG emissions - Refrigerants ^[6]	Use	Modelled	INA	KgCO ₂ eq/kW _{coolth}	INA	KgCO ₂ eq

Use of freshwater resource

Building operation ^[8]	INA	INA	INA	INA	INA	INA
Construction process ^[9]	INA	INA	INA	INA	INA	INA

Construction waste and recovery

Construction waste ^[10]	Construction	Target	INA	tonnes/100m ²	INA	tonnes
Construction waste diverted from landfill ^[10]	Construction	Target	INA	%	INA	tonnes
Demolition waste diverted from landfill ^[11]	Construction	Target	INA	%	INA	INA
Demolition waste to disposal ^[11]	Construction	Target	INA	%	INA	INA
Material for re-use ^[12]	Construction	Target	INA	tonnes/100m ²	INA	tonnes
Material for recycling ^[12]	Construction	Target	INA	tonnes/100m ²	INA	tonnes
Material for energy recovery ^[12]	Construction	Target	INA	tonnes/100m ²	INA	tonnes
Hazardous waste to disposal ^[12]	Construction	Target	INA	tonnes/100m ²	INA	tonnes

Sourcing of materials

Materials responsibly sourced ^[13]	Construction	Measured	0.1	%	-	-
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Thermal comfort

Predicted Mean Vote (PMV)	Use	Modelled	INA	Index	-	-
Predicted Percentage Dissatisfied (PPD)	Use	Modelled	INA	%	-	-

Indoor Air Quality

Formaldehyde concentration level ^[14]	INA	INA	-	INA	INA	INA
Total volatile organic compound concentration ^[14]	INA	INA	INA	INA	INA	INA

Notes

- 1 Modelled using approved software compliant with the UK's National Calculation Method which in turn is compliant with Article 3 of The Energy Performance of Buildings Directive (EPBD) 2002/91/EC. Modelling includes building energy consumption resulting from the specification of a 'controlled', 'fixed building service' (as defined in the relevant Approved Document or Guidance produced for each UK territory).
- 2 The reported impact includes technologies that produce energy (on-site and/or near-site) as defined by Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.
- 3 The reported impact includes energy consumption from construction plant, equipment and site accommodation. This KPI is not assessed/reported at the design stage of assessment/certification.
- 4 The reported impact covers transport of the construction materials that make-up the main building elements and ground works and landscaping materials (from the factory gate to the site) and construction waste (from the construction gate to waste disposal processing / recovery centre gate). Main building elements are defined in the BREEAM 2018 New Construction Technical Guide (SD5076). This KPI is not assessed/reported at the design stage of assessment/certification.
- 5 The reported impact covers the construction materials that make-up the main building elements (over a 60 year study period). Main building elements are defined in the BREEAM UK New Construction 2018 Technical Guide (SD5076). The data is quantified using BRE's Environmental Profiles Methodology. The Environmental Profiles Methodology has been peer reviewed to comply with BS ISO 14040 and represents the Product Category Rules for BRE Global's environmental labelling scheme (EPD - ISO 14025, Type III) for construction products and elements.
- 6 The reported impact is for a 10 year study period. The calculation of the Direct Effect Life Cycle CO₂eq emissions used by BREEAM is based on the Total Equivalent Warming Impact (TEWI) calculation method for new stationary refrigeration and air conditioning systems, as described in Annex B of BS EN 378-1:2008.
- 7 The reported impact covers emissions from either one or a combination of space heating, cooling and hot water heating (refer to Pol02 Assessment Issue for scope of emissions)
- 8 The reported impact includes net water consumption from the micro-components utilised by building occupants for sanitary purposes. The impact accounts for water recycling/rainwater collection, where used for permissible non-potable water demands (For further detail refer to BREEAM UK New Construction 2018 Technical Guide (SD5076)).
- 9 The reported impact is net water consumption i.e. accounts for any water recycling/rainwater collection used to off-set a potable site demand. This KPI is not assessed/reported at the design stage of assessment/certification.
- 10 The reported impact covers non-hazardous waste from new construction materials, it therefore excludes hazardous and demolition and excavation waste. Where assessed and reported at the design stage of assessment this KPI is based on a target as reported in a compliant Resource Management Plan.
- 11 The reported impact covers non-hazardous waste from site demolition. Where assessed and reported at the design stage at the design stage of assessment this KPI is based on the target demolition waste diverted from landfill, as reported in a compliant Site Waste Management Plan. If no demolition taking place on site this KPI is not applicable.
- 12 Where assessed and reported at the design stage of assessment this KPI is based on a target as reported in a compliant Site Waste Management Plan.
- 13 The reported impact covers the proportion of the key building elements present and assessed by BREEAM that are responsibly sourced. Responsibly sourced and key building elements are defined in the BREEAM UK New Construction 2018 Technical Guide (SD5076).
- 14 The total volatile organic compound (TVOC) concentration is measured post construction (but pre-occupancy) over 8 hours. Formaldehyde concentration level is measured post construction (but pre-occupancy) averaged over 30 minutes. Both KPI's are measured in accordance with European and/or ISO standards (refer to the BREEAM New Construction Technical Manual for relevant standard numbers). At the design stage of assessment no data is available for this KPI as they are both measured once the building has been constructed (but pre-occupancy) for the purpose of post construction assessment.

"INA" = Indicator Not Assessed. This will be the case where either the data required for the KPI is not gathered/measured by the building's project team or not assessed/quantified in BREEAM for a particular

BREEAM UK New Construction 2018 Assessment Report: Assessment Issue Scoring

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Building name	Silver Street Student Housing
Building score (%)	70.30%
Building rating	Excellent
Minimum standards level achieved	Excellent level

MANAGEMENT

Man 01 Project brief and design

No. of BREEAM credits available	4	Available contribution to overall score	2.10%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Project delivery planning	Yes	1	1
Stakeholder consultation (interested parties)	Yes	1	1
Prerequisite: Have the client and the contractor formally agreed performance targets?	Yes		
BREEAM Advisory Professional (Concept Design)	Yes	1	1
BREEAM Advisory Professional (Developed Design)	Yes	1	1

Total BREEAM credits achieved	4
Total contribution to overall building score	2.10%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Man 02 Life cycle cost and service life planning

No. of BREEAM credits available	4	Available contribution to overall score	2.10%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria		Compliant?	Credits available	Credits achieved
Elemental LCC Component level LCC options appraisal Capital cost reporting Capital cost of the project		Yes	2	2
		Yes	1	1
		Yes	1	0
			£/m ²	
Total BREEAM credits achieved			3	
Total contribution to overall building score			1.57%	
Total BREEAM exemplary credits achieved			N/A	
Minimum standard(s) level		N/A		

Assessor comments/notes:

Man 03 Responsible construction practices

No. of BREEAM credits available	6	Available contribution to overall score	3.14%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	Yes

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved	
Prerequisite: Are all timber and timber-based products used during the construction process of the project 'legally harvested and traded timber'?	Yes			
Environmental management	Yes	1	1	
Prerequisite: Have the client and the contractor formally agreed performance targets?	Yes			
BREEAM Advisory Professional (site)	Yes	1	1	
Responsible construction management	2	2	2	
Monitoring of construction site impacts	Yes			
Utility consumption	Yes	1	0	Note: The KPI data is not available
Transport of construction materials and waste	Yes	1	1	Note: The KPI data is not available
Exemplary level criteria - Responsible construction management		1	0	

Key Performance Indicators: Construction site energy use

Energy consumption (total) - site processes		kWh
Energy consumption (intensity) - site processes		kWh/project value
Distance (total) - materials transport to site		km
Distance (total) - waste transport from site		km

Key Performance Indicators: Construction site greenhouse gas emissions

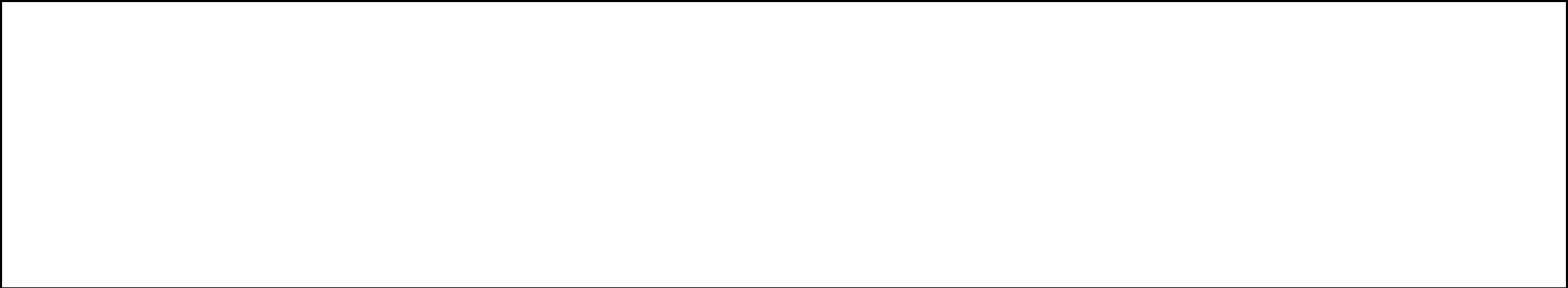
Process greenhouse gas emissions (total) - site processes		KgCO ₂ -eq
Carbon dioxide emissions (intensity) - site processes		KgCO ₂ -eq/project value
Carbon dioxide emissions (total) - materials transport to site		KgCO ₂ -eq
Carbon dioxide emissions (total) - waste transport from site		KgCO ₂ -eq
Carbon dioxide emissions (intensity) - materials transport to site		KgCO ₂ -eq/project value
Carbon dioxide emissions (intensity) - waste transport from site		KgCO ₂ -eq/project value

Key Performance Indicators: Construction site use of freshwater resources

Use of potable water resource (total) - site processes		m ³
Use of potable water resource (intensity) - site processes		m ³ /£100k

Total BREEAM credits achieved	5
Total contribution to overall building score	2.62%
Total BREEAM exemplary credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:



Man 04 Commissioning and handover

No. of BREEAM credits available	4	Available contribution to overall score	2.10%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	Yes

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Commissioning and testing schedule and responsibilities	Yes	1	1
Commissioning - design and preparation	Yes	1	1
Testing and inspecting building fabric	Yes	1	1
Handover - Has a Building User Guide been developed prior to handover?	Yes		
Handover - Has a training schedule been prepared for building occupiers/managers?	Yes	1	1

Total BREEAM credits achieved	4
Total contribution to overall building score	2.10%
Total BREEAM exemplary 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	1.57%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	Yes

Is this a speculative development?	No
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Assessment Criteria

	Compliant?	Credits available	Credits achieved
Aftercare support	Yes	1	1
Commissioning - implementation	Yes	1	1
Post occupancy evaluation	Yes	1	0
The client or building occupier commits funds to pay for the POE in advance	No		

Total BREEAM credits achieved	2
Total contribution to overall building score	1.05%

Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

HEALTH & WELLBEING

Hea 01 Visual Comfort

No. of BREEAM credits available	5	Available contribution to overall score	3.68%
No. of BREEAM exemplary credits available	2	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Control of glare from sunlight	Yes	1	1
Daylighting (building type dependent)	2	2	2
View out	Yes	1	1
Internal and external lighting levels, zoning and controls	Yes	1	1

Exemplary level daylighting	No	1	0
Exemplary level criteria - Internal and external lighting levels, zoning and control	No	1	0

Total BREEAM credits achieved	5
Total contribution to overall building score	3.68%
Total BREEAM exemplary credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Hea 02 Indoor Air Quality

No. of BREEAM credits available	4	Available contribution to overall score	2.95%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Prerequisite: Indoor air quality (IAQ) plan	Yes		
Ventilation	No	1	0
Emissions from building products	1	2	1
Post-construction indoor air quality measurement	No	1	0

Exemplary level criteria - Emissions from building products		1	0
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Key Performance Indicators: Indoor air quality

Formaldehyde concentration		µg/m ³
Total volatile organic compound (TVOC) concentration		µg/m ³

Total BREEAM credits achieved	1
Total contribution to overall building score	0.74%
Total BREEAM exemplary 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	2.21%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

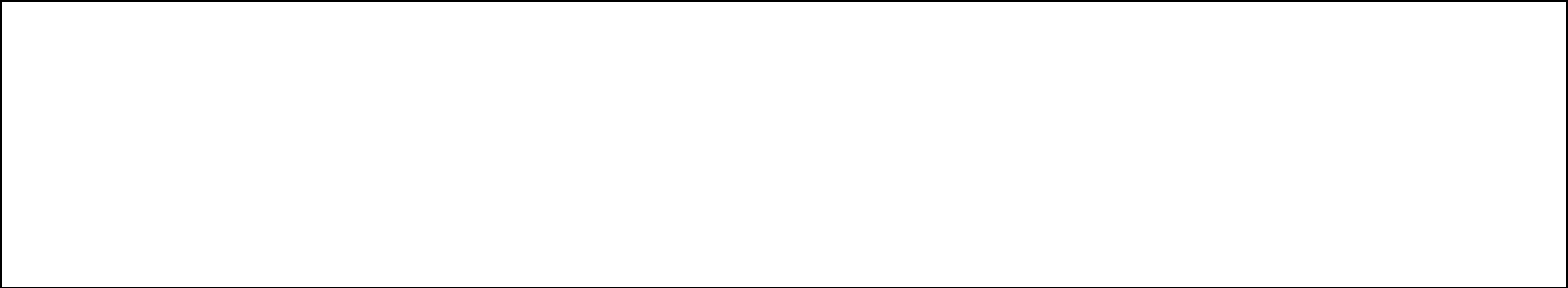
Assessment Criteria

	Compliant?	Credits available	Credits achieved
Thermal modelling	Yes	1	1
Design for future thermal comfort	Yes	1	1
Thermal zoning and control	Yes	1	1

Key Performance Indicators	Thermal comfort	For a projected climate scenario
Predicted Mean Vote (PMV)		
Predicted Percentage Dissatisfied (PPD)		

Total BREEAM credits achieved	3
Total contribution to overall building score	2.21%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:



Hea 05 Acoustic Performance

No. of BREEAM credits available	4	Available contribution to overall score	2.95%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Criteria performance requirements or SQA bespoke requirements?	Criteria performance requirements
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Assessment Criteria

	Credits	Credits available	Credits achieved
Sound insulation	1	2	1
Indoor ambient noise level	Yes	1	1
Room acoustics	Yes	1	1

Total BREEAM credits achieved	3
Total contribution to overall building score	2.21%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Hea 06 Security

No. of BREEAM credits available	1	Available contribution to overall score	0.74%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Security of site and building	Yes	1	1
Exemplary level criteria	No	1	0

Total BREEAM credits achieved	1
Total contribution to overall building score	0.74%
Total BREEAM exemplary credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Hea 07 Safe & Healthy Surroundings

No. of BREEAM credits available	2	Available contribution to overall score	1.47%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Safe Access	Yes	1	1
Outside Space	Yes	1	1

Total BREEAM credits achieved	2
Total contribution to overall building score	1.47%
Total BREEAM exemplary 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	13	Available contribution to overall score	10.40%
No. of BREEAM exemplary credits available	5	Minimum standards applicable	Yes

Country of the UK where the building is located	England
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Assessment Criteria

	Actual	Notional	
Photovoltaic systems			kWh/m ²
Wind turbines			kWh/m ²
CHP generators			kWh/m ²
Solar thermal systems			kWh/m ²
Building energy demand	200.000	250.000	MJ/m ² yr
Building primary energy consumption	190.000	300.000	kWh/m ² yr
Building CO ₂ -eq emissions	30.000	50.000	KgCO ₂ -eq/m ² yr
Does this building contain areas that require a SAP assessment?	No		

What % of the building's total floor area (GIA) does it apply to?			
SAP Building energy demand			MJ/m ² yr
SAP Building primary energy consumption			kWh/m ² yr
SAP Building CO ₂ -eq emissions			KgCO ₂ -eq/m ² yr

Building Score

Total BREEAM credits achieved	6
Heating and cooling demand energy performance ratio (EPRdem)	0.154
Primary consumption energy performance ratio (EPRpc)	0.216
CO ₂ -eq energy performance ratio (EPRCO ₂ -eq)	0.240
Overall building energy performance ratio (EPRnc)	0.610
% improvement over building regulations (CO2-eq)	40.00%

Assessment criteria (exemplary credits)

	Compliant?	Credits available	Credits achieved
Zero net CO ₂ -eq emissions	No	3	0
Equivalent % of additional emissions from unregulated energy that are offset by LZC sources			
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?		kWh/yr	

Assessment criteria

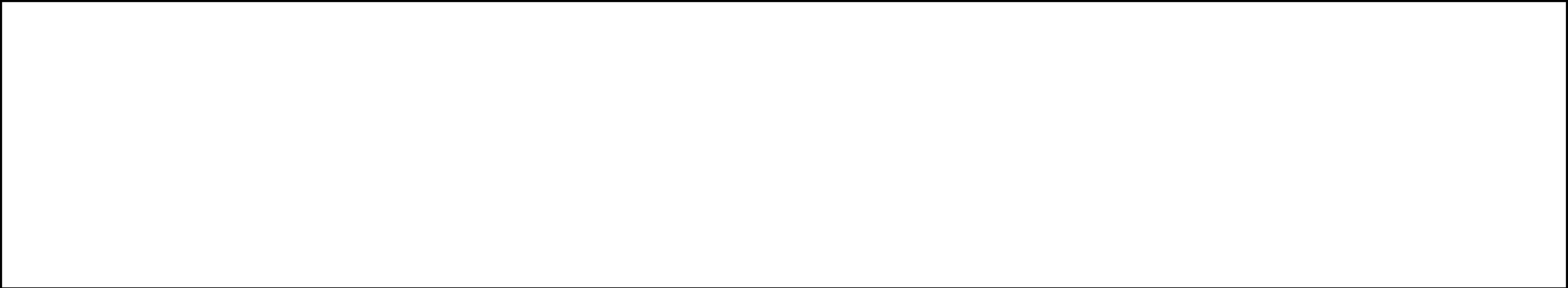
	Compliant?	Credits available	Credits achieved
Has a design workshop focusing on operational energy performance been carried out?	No		
Additional energy modelling to generate predicted operational energy consumption figures carried out?		4	0
Predicted energy consumption targets by end use, design assumptions and input data reported?			
Risk assessment to highlight any significant design, technical, and process risks?			
Has the operational energy performance of the building been substantially improved?			

Assessment criteria (exemplary credits)

	Compliant?	Credits available	Credits achieved
Maximum credits achieved in Ene 02 Energy monitoring?	Yes	2	0
The client or building occupier commits funds to pay for the post-occupancy stage?	Please select		
The energy model is submitted to BRE and retained by the building owner?	Please select		

Total BREEAM credits achieved	6
Total contribution to overall building score	4.80%
Total BREEAM exemplary credits achieved	0
Minimum standard(s) level	Excellent level

Assessor comments/notes:



Ene 02 Energy monitoring

No. of BREEAM credits available	1	Available contribution to overall score	0.80%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	Yes

Assessment criteria

	Compliant?	Credits available	Credits achieved
Sub-metering of end use categories	Yes	1	1
Sub-metering of high energy load and tenancy areas		0	0

Total BREEAM credits achieved	1
Total contribution to overall building score	0.80%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Ene 03 External lighting

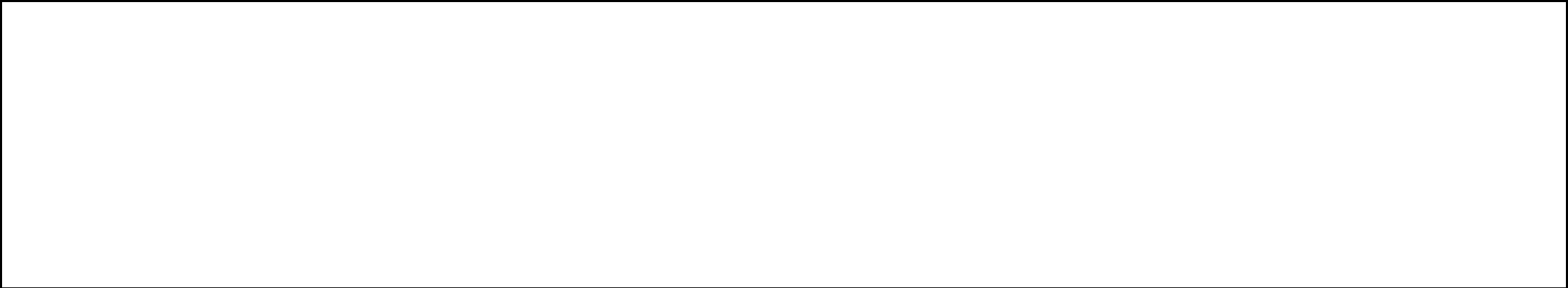
No. of BREEAM credits available	1	Available contribution to overall score	0.80%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment criteria

	Compliant?	Credits available	Credits achieved
External lighting has been designed out	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	0.80%
Total BREEAM exemplary 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	2.40%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment criteria	Compliant?	Credits available	Credits achieved
Has the first credit within Hea 04 been achieved?	Yes		
Passive design analysis	Yes	1	1
Free cooling	No	1	0
Low and zero carbon technologies	Yes	1	1

Key Performance Indicators - Low and/or zero carbon energy generation

Total on-site and/or near-site LZC energy generation		kWh/yr
Expected energy demand and CO ₂ -eq emissions reduction resulting from passive design measures as a percentage	Energy	
		kWh/m ² yr
	CO2 emissions	
		KgCO ₂ -eq/m ² yr
Expected energy demand and CO ₂ -eq emissions reduction resulting from passive design measures as a percentage	Energy	
		%
	CO2 emissions	
		%
Expected reduction in CO ₂ -eq emissions resulting from the LZC technologies		KgCO ₂ -eq/m ² yr
Expected reduction in CO ₂ -eq emissions resulting from the LZC technologies as a percentage		%
Total BREEAM credits achieved	2	
Total contribution to overall building score	1.60%	
Total BREEAM exemplary credits achieved	N/A	
Minimum standard(s) level	N/A	

Assessor comments/notes:

Ene 05 Energy efficient cold storage

Assessment issue not applicable

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

Assessment criteria		Compliant?	Credits available	Credits achieved
	Refrigeration energy consumption		N/A	N/A
	Indirect greenhouse gas emissions		N/A	N/A
Total BREEAM credits achieved			N/A	
Total contribution to overall building score			N/A	
Total BREEAM exemplary credits achieved			N/A	
Minimum standard(s) level			N/A	

Assessor comments/notes:

Ene 06 Energy efficient transportation systems

No. of BREEAM credits available	2	Available contribution to overall score	1.60%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	N/A

Assessment criteria	Compliant?	Credits available	Credits achieved
Energy consumption	Yes	1	1
Energy efficient features - Lifts	Yes	1	1
Energy efficient features - Escaltors or moving walks			

Total BREEAM credits achieved	2
Total contribution to overall building score	1.60%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Ene 07 Energy efficient laboratory systems

Assessment issue not applicable

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

Assessment criteria	Compliant?	Credits available	Credits achieved
Design specification			
Laboratory containment devices and containment areas			
Best practice energy efficient measures (table 33)			
Fume cupboard volume flow rates			
Grouping / isolation of high filtration/ventilation activities			
Energy recovery - heat			
Energy recovery - cooling			
Grouping of cooling loads			
Free cooling			
Load responsiveness			
Clean rooms			

	Diversity	
	Room air-change rates	
	Fan power	

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

Assessor comments/notes:

Ene 08 Energy efficient equipment

Assessment issue not applicable

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

Assessment criteria	Present?	Major impact
Swimming pool present?		
Laundry facilities with commercial-sized appliances present?		
Data centre present?		
IT-intensive operating areas present?		
Domestic scale appliances (individual and communal facilities) present?		
Healthcare equipment present?		
Kitchen and catering facilities present?		
Other contributors		

	Compliant	Credits available	Credits achieved
Significant majority contributors BREEAM compliant		N/A	N/A

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

Assessor comments/notes:

TRANSPORT

Tra 01 Transport assessment and travel plan

No. of BREEAM credits available	2	Available contribution to overall score	1.67%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant	Credits available	Credits achieved
Travel plan	Yes	2	2

Total BREEAM credits achieved	2
Total contribution to overall building score	1.67%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Tra 02 Sustainable transport measures

No. of BREEAM credits available	10	Available contribution to overall score	8.33%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Prerequisite	Yes		
Location type (based on existing AI)		AI <25	
Number of points achieved overall	3	10	3

Total BREEAM credits achieved	3
Total contribution to overall building score	2.50%
Total BREEAM exemplary 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	3.89%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	Yes

Assessment Criteria

Compliant?

Credits available

Credits achieved

Please select the calculation procedure used	Standard approach		
Credits awarded	3	5	3
Exemplary performance	No	1	0

Standard approach data

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

Key Performance Indicator - use of freshwater resource

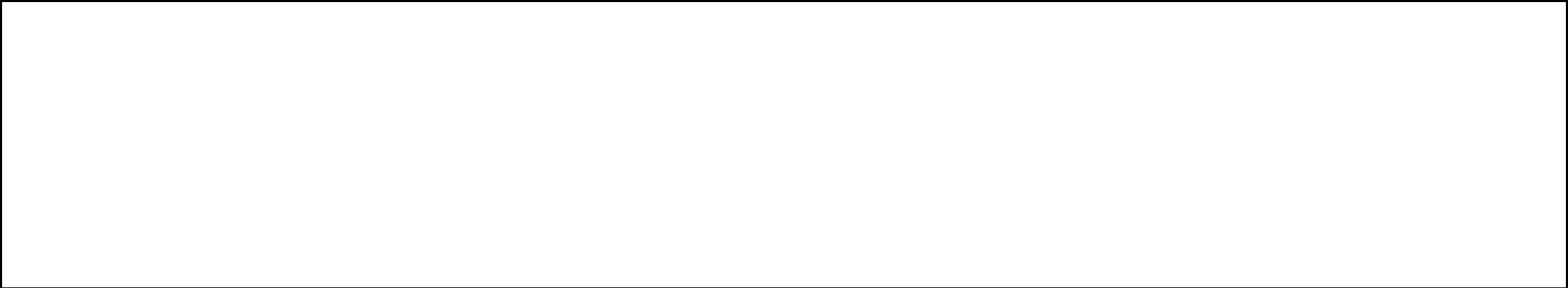
Total net Water Consumption		m ³ /person/yr
Default building occupancy		

Alternative approach data

Overall microcomponent performance level achieved	
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Total BREEAM credits achieved	3
Total contribution to overall building score	2.33%
Total BREEAM exemplary 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	0.78%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	Yes

Assessment Criteria	Compliant?	Credits available	Credits achieved
Water meter on the mains water supply to each building	Yes	1	1
Sub-metering/monitoring equipment on supply to plant/building areas	Yes		
Pulsed output or other open protocol communication output and BMS connection	Yes		
The water monitoring strategy used enables the identification of all water consumption for sanitary uses as assessed under Wat 01 (L/person/day)	Yes		
Total BREEAM credits achieved	1		
Total contribution to overall building score	0.78%		
Total BREEAM exemplary 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	1.56%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Leak detection system	Yes	1	1
Are WC facilities only provided within the residential areas of a long-term residential accommodation?	No		
Flow control devices	Yes	1	1
Total BREEAM credits achieved	2		
Total contribution to overall building score	1.56%		
Total BREEAM exemplary credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Wat 04 Water Efficient Equipment

No. of BREEAM credits available	1	Available contribution to overall score	0.78%
No. of BREEAM exemplary credits available	No	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Water efficient consumption	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	0.78%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

MATERIALS**Mat 01 Environmental impacts from construction products - Building life cycle assessment (LCA)**

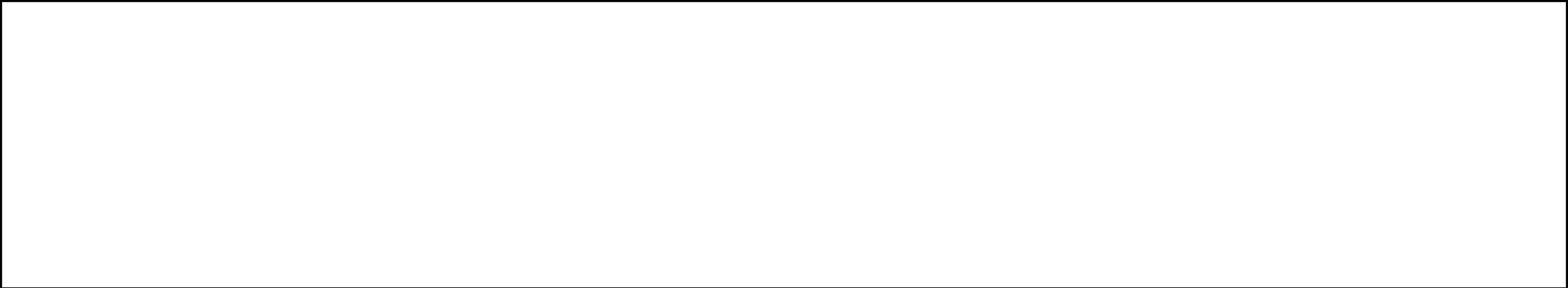
No. of BREEAM credits available	7	Available contribution to overall score	7.50%
No. of BREEAM exemplary credits available	3	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Total Mat 01 credits achieved - taken from the Mat 01/02 Results Submission Tool	4	7	4
Total Exemplary credits achieved - taken from the Mat 01/02 Results Submission Tool	0	3	0

Total BREEAM credits achieved	4
Total contribution to overall building score	4.29%
Total BREEAM exemplary credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:



Mat 02 Environmental impacts from construction products - Environmental Product Declarations (EPD)

No. of BREEAM credits available	1	Available contribution to overall score	1.07%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Mat 02 credit achieved - Taken from the Mat 01/02 Results Submission Tool.	1	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	1.07%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Mat 03 Responsible sourcing of construction products

No. of BREEAM credits available	4	Available contribution to overall score	4.29%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	Yes

Assessment Criteria

	Compliant	Credits available	Credits achieved
Prerequisite - All timber and timber based products are 'Legally harvested and traded timber'	Yes		
Has the enabling sustainable procurement credit been achieved?	Yes	1	1
Mat 03 minimum scope level	plus Substructure and hard landscaping / Internal Finishes		
Percentage of available for percentage of RSM points achieved	10.00%	3	1
Exemplary level performance		1	0

Total BREEAM credits achieved	2
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Total contribution to overall building score	2.14%
Total BREEAM exemplary credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Mat 05 Designing for durability and resilience

No. of BREEAM credits available	1	Available contribution to overall score	1.07%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	N/A

Assessment Criteria	Compliant?	Credits available	Credits achieved
Protecting vulnerable parts of the building from damage and exposed parts of the building from material degradation	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	1.07%
Total BREEAM exemplary 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	1.07%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Material optimisation measures investigated and implemented at all relevant stages	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	1.07%
Total BREEAM exemplary 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	2.67%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	Yes

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Is demolition occurring under the developer's ownership for the purpose of enabling the assessed development?	No		
Pre-demolition audit			
Compliant Resource Management Plan	Yes	3	2
Have waste materials been sorted into separate key waste groups?	Yes	1	0
Exemplary level criteria	No		
BREEAM exemplary level benchmark		1	0

Simple Buildings - Assessment Criteria

	Compliant?	Credits available	Credits achieved
Pre-demolition audit			
Construction resource efficiency - compliant Resource Management Plan			
RMP measurements and reporting			
Diversion of resources from landfill			
Exemplary level criteria			
BREEAM exemplary level benchmark			

Key Performance Indicators - Construction Waste

Measure/units for the data being reported	m3	
Non-hazardous construction waste (excluding demolition/excavation) - fill in to award "Construction resource efficiency" credits	5.00	m3/100m2
Total non-hazardous construction waste generated	2.00	m3
Non-hazardous non-demolition construction waste diverted from landfill - fill in to award diversion from landfill credit		%
Total non-hazardous non-demolition construction waste diverted from landfill	10.00	m3
Non-hazardous demolition waste diverted from landfill - fill in to award diversion of landfill credit		%
Total non-hazardous demolition waste generated		m3
Total non-hazardous demolition waste to disposal		m3
Non-hazardous excavation waste diverted from landfill - fill in to award credit		%
Material for reuse		m3
Material for recycling		m3
Material for energy recovery		m3
Hazardous waste to disposal		m3

Total BREEAM credits achieved	2
Total contribution to overall building score	1.33%

Total BREEAM exemplary credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Wst 02 Use of recycled and sustainably sourced aggregates

No. of BREEAM credits available	1	Available contribution to overall score	0.67%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Is demolition occurring under the developer's ownership for the purpose of enabling the assessed development?	No		
Pre-demolition audit			
Projects Sustainable Aggregate points		1	0
Exemplary performance credit		1	0

Key Performance Indicators

Total quantity of aggregate		Units - tonnes
% of high - grade aggregate that is recycled/ secondary aggregate by application		%

Total BREEAM credits achieved	0
Total contribution to overall building score	0.00%
Total BREEAM exemplary 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	0.67%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	Yes

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Compliant recycling and non-recyclable waste storage allocated	Yes	1	1
Static waste compactor(s) or baler(s)	N/A		
Vessel(s) for composting suitable organic waste and water outlet	N/A		
Multi-residential buildings with individual bedrooms and communal facilities only criteria achieved	Yes		

Multi-residential buildings with self-contained dwellings or bedsits only criteria achieved

Please select

Total BREEAM credits achieved	1
Total contribution to overall building score	0.67%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Wst 04 Speculative finishes (Offices only)**Assessment issue not applicable**

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

Assessment Criteria

Compliant?

Credits available

Credits achieved

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Total BREEAM credits achieved	N/A
Total contribution to overall building score	N/A
Total BREEAM exemplary 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	0.67%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	N/A

Assessment Criteria

Compliant?

Credits available

Credits achieved

Resilience of structure, fabric, building services and renewables installation	Yes	1	1
Exemplary level - responding to climate change	No	1	0

Total BREEAM credits achieved	1
Total contribution to overall building score	0.67%
Total BREEAM exemplary credits achieved	0
Minimum standard(s) level	N/A

Assessor comments/notes:

Wst 06 Design for disassembly and adaptability

No. of BREEAM credits available	2	Available contribution to overall score	1.33%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	N/A

Assessment Criteria	Compliant?	Credits available	Credits achieved
Design for disassembly and functional adaptability - recommendations	Yes	1	1
Disassembly and functional adaptability - implementation	Yes	1	1

Total BREEAM credits achieved	2
Total contribution to overall building score	1.33%
Total BREEAM exemplary 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	2.00%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Percentage of proposed development's footprint on previously occupied land	80.00%	1	1
Contaminated land	No	1	0

Total BREEAM credits achieved	1
Total contribution to overall building score	1.00%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

LE 02 Ecological risks and opportunities

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Assessment route selection	Comprehensive		
Prerequisite - Statutory obligations	Yes		
Survey and Evaluation	Yes	2	2
Determining ecological outcomes	Yes		
Exemplary level - Wider site sustainability	No	1	0
Total BREEAM credits achieved	2		
Total contribution to overall building score	2.00%		
Total BREEAM exemplary credits achieved	0		
Minimum standard(s) level	N/A		

Assessor comments/notes:

LE 03 Managing impacts on ecology

No. of BREEAM credits available	3	Available contribution to overall score	3.00%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Assessment route	Comprehensive		
Prerequisite - Ecological risks and opportunities	Yes		
Planning and measures on-site	Yes	1	1
Managing negative impacts	1	2	1
Total BREEAM credits achieved	2		
Total contribution to overall building score	2.00%		

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

Assessor comments/notes:

LE 04 Ecological change and enhancement

No. of BREEAM credits available	4	Available contribution to overall score	4.00%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Assessment route	Comprehensive		
Prerequisite - Managing negative impacts on ecology	Yes		
Change and enhancement of ecology (Foundation route only)		0	0
Ecological enhancement (Comprehensive route only)	Yes	1	1
Change and enhancement of ecology (Comprehensive route only)	1	3	1
Exemplary level criteria (Comprehensive route only)	No	1	0

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

Assessor comments/notes:

LE 05 Long term ecology management and maintenance

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

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Assessment route	Comprehensive		
Prerequisite - Statutory obligations, planning and site implementation	Yes		
Management and maintenance throughout the project	Yes	1	1
Landscape and ecology management plan	Yes	1	1

Total BREEAM credits achieved	2
Total contribution to overall building score	2.00%
Total BREEAM exemplary credits achieved	N/A

Minimum standard(s) level	N/A
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Assessor comments/notes:

POLLUTION

Pol 01 Impact of refrigerants

No. of BREEAM credits available	3	Available contribution to overall score	2.00%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Refrigerant containing systems installed in the assessed building?	Yes	2	2
All systems (with electric compressors) comply with BS EN 378:2016 (parts 2 and 3) and (where applicable) Institute of Refrigeration Ammonia Refrigeration Systems code of practice?	Yes		
Total Direct Effect Life Cycle CO ₂ -eq/kW emissions from the system		kgCO ₂ eq/kW heating and cooling capac	
Global Warming Potential of the specified refrigerant(s) 10 or less?	Yes		

Leak Detection

Are all the systems hermetically sealed?	Yes	1	1
BREEAM compliant automatic refrigerant leak detection system installed and able to manage the remaining refrigerant charge			

Total BREEAM credits achieved	3
Total contribution to overall building score	2.00%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Pol 02 Local air quality

No. of BREEAM credits available	2	Available contribution to overall score	1.33%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant	Credits available	Credits achieved
Is the project required to connect to a District Heating system, and it supplies all heating and hot water demands to the building?	No		
How many credits have been achieved?	2	2	2

Total BREEAM credits achieved	2
Total contribution to overall building score	1.33%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Pol 03 Flood and surface water management

No. of BREEAM credits available	5	Available contribution to overall score	3.33%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Has an appropriate consultant demonstrated and confirmed the development's compliance with all sought credits?	Yes		
Has a site-specific flood risk assessment been conducted?	Yes		
Annual probability of flooding	Low	2	2
Has the pre-requisite for the Surface Water Run-Off credits been achieved?	Yes		
Has the Surface Water Run-Off - Rate credit been achieved?	Yes	1	1
Flooding of property will not occur in the event of local drainage system failure	Yes		
Has the Surface Water Run-Off - Volume credit been achieved?	Yes	1	1
Minimising watercourse pollution	Yes	1	1

Total BREEAM credits achieved	5
Total contribution to overall building score	3.33%
Total BREEAM exemplary credits achieved	N/A
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	0.67%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
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External lighting has been designed out	Yes	1	1
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Total BREEAM credits achieved	1
Total contribution to overall building score	0.67%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Pol 05 Reduction of noise pollution

No. of BREEAM credits available	1	Available contribution to overall score	0.67%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant	Credits available	Credits achieved
Noise-sensitive areas/buildings within 800m radius of the development	Yes		
Is the site compliant with all relevant criteria?	Yes	1	1
Total BREEAM credits achieved	1		
Total contribution to overall building score	0.67%		
Total BREEAM exemplary 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	Compliant?	Credits available	Credits achieved
Man 01 BREEAM AP - Simple Buildings only	N/A	N/A	N/A
Man 03 Responsible construction practices	No	1	0
Hea 01 Visual Comfort	No	2	0
Hea 02 Indoor Air Quality	No	1	0
Hea 06 Security	No	1	0
Ene 01 Reduction of energy use and carbon emissions	No	5	0
Wat 01 Water Consumption	No	1	0
Mat 01 Environmental impacts from construction products - Building LCA	No	3	0
Mat 03 Responsible Sourcing of Materials	No	1	0
Wst 01 Construction Waste Management	No	1	0

Wst 01 Construction Waste Management - Simple Buildings only	N/A	N/A	N/A
Wst02 Recycled Aggregates	No	1	0
Wst 05 Adaptation to climate change	No	1	0
LE 02 Identifying and understanding the risks and opportunities for the site	No	1	0
LE 04 Change and enhancement of ecological value (Route 2 only)	No	1	0
Pol 03 Flood and surface water management - Simple Buildings only	N/A	N/A	N/A

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

Assessor comments/notes: