

Introduction

Elma Sustain has been appointed to prepare BREEAM UK NC 2018 preliminary assessments as part of the feasibility Study for the Pant Industrial Estate new commercial and industrial development by MKR Developments Ltd.

The requirement by Welsh Government is for the development to achieve BREEAM Very Good.

Pre-Assessment Issue 1 @ 2019-07-25

Assessment methodology confirmed as Industrial filtered to 'Core' for the large units.

Pre-Assessment Issue 2 @ 2019-09-04

Assessment methodology confirmed as Industrial but changed to 'Shell and Core' rather than just 'core', for the 'small' units.

The Large Units currently achieve a score of **55.10%** (Very Good), whilst the Small Units currently achieve a score of **59.20%**.

The change from 'Core' to 'Shell and Core' brings additional credits into the assessment for the small units, as follows:

Man04: Commissioning and Handover

Commissioning and testing schedule and responsibilities - 1 credit added.

Commissioning - design and preparation - 1 credit added.

Handover - Preparation of a Building User Guide developed prior to handover and a Training schedule prepared for building occupiers/ manager - 1 credit added.

(These credits are tailored to the level of services installed)

Hea05: Acoustic Performance

Indoor Ambient Noise Level - I've changed this credit to awarded, as the internal layouts have now been determined.

Ene02: Energy Monitoring

Sub-metering of end use categories - 1 credit added.

Sub-metering of high energy load and tenancy load - 1 credit added.

Wat01: Water Consumption

3 credits added - Typical water consumption specification to follow.

Wat02: Water Monitoring

Sub-metering/ monitoring equipment on supply to plant/ building areas - Requirement added to enable the overall credit to be awarded.

However, where applicable we should be able to confirm that there is no additional benefit from the installation of sub metering i.e. The small units are likely to only have a small water demand, in this instance the credit can be awarded without sub meters provided.

Wat03: Water Leak Detection and Prevention

Flow Control Devices - 1 credit added.

Mat03: Responsible Sourcing of Construction Products

Amended to include the Superstructure - 1 credit added.

LE01 Site Selection

Percentage of proposed development's footprint on previously occupied land - 1 credit added.

Contaminated land - 1 credit added

(Information taken from the feasibility study)

Pol01: Impact of Refrigerant

2 credits added - Systems specified are likely to achieve a TDELCO of less than 999kg/CO₂eq/kW (heating and cooling capacity) and be hermetically sealed.

Pol02: Local Air Quality

Electrical systems achieve 2 credits by default, however, as the warehouse element will have Gas Radiant Heating this will need to comply with the criteria - 1 credit added at present (although 2 credits may be achievable).

Assessment Timeline – Early Stage Credits

The Assessment Timeline is applicable to 'Core' and 'Shell and Core'. The following table is an extract from GN37: BREEAM UK New Construction 2018 scheme assessment timeline. The table confirms which credits must be achieved by the end of the applicable RIBA early stages for the credit to be awarded.

Required	Strategic Definition	Preparation and Brief	Concept Design
Man01: Project design and brief – BREEAM AP appointment			X
Man02: Life Cycle Costing and Service Life Planning – Elemental LCC to maximise project performance			X
Hea05: Acoustic Performance – Acoustician appointment			X
Ene04: Passive design analysis			X
Ene04: Low and zero carbon technologies – feasibility report			X
Tra01: Travel Plan		X	
Tra02: Sustainable transport measures – consultation with local authority (Option 6 only)		X	
Mat01: Construction products - building life cycle analysis submission			X

Mat03:	Responsible sourcing of materials – sustainable procurement plan	X	
Mat06:	Material efficiency – Stage 1 and 2 actions	X	X
Wst05:	Climate adaptation strategy appraisal		X
Wst06:	Design for disassembly and functional adaptability		X

Advisable	Strategic Definition	Preparation and Brief	Concept Design
LE01:	Site selection – previously occupied land	X	
LE01:	Site selection – contaminated land	X	
LE02:	Identifying and understanding the risks and opportunities for the site – Survey and evaluation	X	
LE02:	Identifying and understanding the risks and opportunities for the site – Determining the site wide outcomes	X	
LE03:	Managing negative impacts on ecology		X
LE04:	Enhancing site ecology		X

Minimum standards for a 'Very Good' rating

To ensure that performance against fundamental environmental issues is not overlooked in pursuit of a specific rating, BREEAM sets minimum standards of performance which must be achieved in addition to the overall percentage score. For a 'Shell only - Very Good' rating the following are applicable.

Credit	Minimum	Requirement
Wat02: Water monitoring	Criterion 1	Provision of a water meter on the mains supply to each building
Mat03: Responsible sourcing of construction products	Criterion 1	Pre-requisite – all timber and timber base products are 'legally harvested and traded timber'

Pant Industrial Estate, Merthyr Tydfil

TYPICAL LARGE UNIT

BREEAM_UK_NC_2018_Assessment_Scoring_and_Reporting_Tool_v2.6_Issue 1 @ 2019-07-25

BREEAM UK New Construction 2018 Assessment Report



General information

BRE Assessment reference no.	x
Client name	x
Building end user/occupier	x
Assessor name	Wendy Lake
Assessors role	Assessor
Assessor organisation	Elma Sustain

Building details

Building name	Pant Industrial Estate - Issue 1 @ 2019-07-25
Building address	Merthyr Tydfil
County	Merthyr
Post code	
Country	Wales
BREEAM scheme	New Construction
BREEAM version	2018 (SD5078)
BREEAM UK 2018 technical manual issue number	SD5078 Issue 2.0
Project scope	Shell only
Building type (main description)	Industrial
Building type (sub-group)	Industrial - Process, manufacturing or vehicle servicing
Does this healthcare building have inpatient areas?	
Does this industrial building have an office area, or other occupied spaces?	No
Assessment stage	Design (interim)
Building floor area (GIA) m ²	1000
Building floor area (NIFA) m ²	1000
Is the building designed to be untreated?	No
Building services - heating system type	None
Building services - cooling system type	None
Are commercial or industrial-sized refrigeration and storage systems specified?	No
Are building user lifts present?	No
Are building user escalators or moving walks present?	No
Are laboratories present?	No
What percentage of total building area do laboratories represent?	
Are there fume cupboard(s) and/or other containment devices present?	
Are there any water demands present other than those assessed in Wat 01?	No
Does the building have external areas within the boundary of the assessed development?	Yes
Are there statutory requirements, or other issues outside of the control of the project, that impact the ability to provide outdoor space?	No
Are there any systems specified that contribute to the unregulated energy load?	No
Are the post-occupancy stage credits targeted in Ene 01?	No

Project team details

Developer	
Principal contractor	
Architect	
Project management	
Building services	
BREEAM Accredited Professional	
Other project team member 1	
Other project team member 2	
Other project team member 3	
Other project team member 4	

BREEAM assessor declaration of assessment accuracy and quality

I, Wendy Lake, a qualified BREEAM assessor working on behalf of Elma Sustain confirm that the content of this report is to the best of my knowledge a true and accurate reflection of the performance of the above named building, as measured against the assessment criteria and reporting requirements of the BREEAM Scheme Document (SD5078). Furthermore, I confirm that this assessment and the information on which it is based has been checked and verified in accordance with BRE Global Ltd's UKAS accredited BREEAM operating procedures for BREEAM assessments and assessors, as described in the technical scheme document (SD5078) and associated BREEAM operational documents.

BREEAM Assessor Signature:

Wendy Lake

Date

25/07/2109

Disclaimer

This report is made on behalf of Elma Sustain. By receiving the report and acting on it, the client - or any third party relying on it - accepts that no individual is personally liable in contract, tort or breach of statutory duty (including negligence).

Disclaimer

Conflict of interest - Where an assessor is employed by the same company as a project/design team member(s) (e.g. energy assessor, suitably qualified ecologist or client representative etc) they must identify and manage any potential conflicts of interest and inform BRE Global Ltd as soon as they become aware of such a conflict. Where possible this should be made clear to BREEAM upon registration of the assessment.

BRE Global do prohibit an assessor from verifying compliance with scheme criteria where they themselves have been directly involved in achieving or implementing a compliant solution, i.e. an assessor cannot assess their own work, for example they cannot be the architect on a project and the assessor. A current exception to this rule is where the assessor is also acting as an accredited BREEAM Advisory Professional on the project.

Where there is a conflict of interest or potential for one, BRE Global Ltd will escalate the assessment report to a more detailed level of quality assurance checking. This will be done to reduce the risk to assessors and clients in the event that a certification outcome is challenged. Additional levels of monitoring may result in additional charges (FS036) being made to the licensed organisation that employs the assessor.

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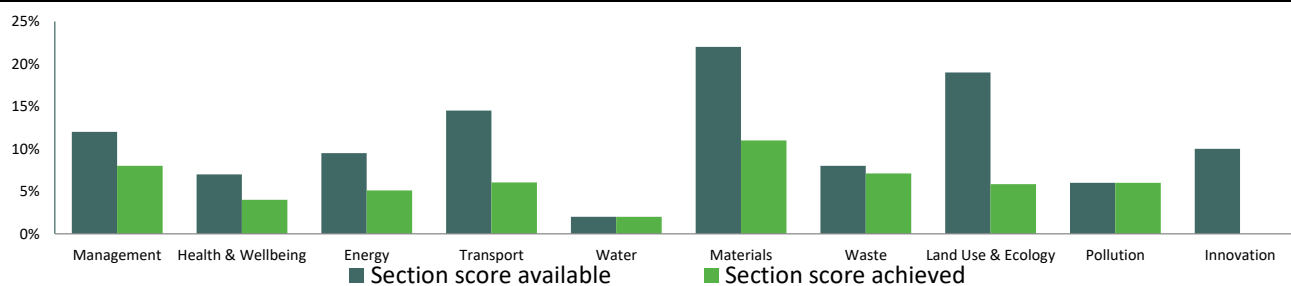
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Overall Building Performance

Building name	Pant Industrial Estate - Issue 1 @ 2019-07-25
BREEAM rating	Very Good
Total Score	55.10%
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	15	10	66.67%	12.00%	8.00%
Health & Wellbeing	7	4	57.14%	7.00%	4.00%
Energy	13	7	53.85%	9.50%	5.11%
Transport	12	5	41.67%	14.50%	6.04%
Water	2	2	100.00%	2.00%	2.00%
Materials	14	7	50.00%	22.00%	11.00%
Waste	9	8	88.89%	8.00%	7.11%
Land Use & Ecology	13	4	30.77%	19.00%	5.84%
Pollution	6	6	100.00%	6.00%	6.00%
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	INA	kWh/m ² /yr	INA	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	0.2	%	-	-
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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 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 PolO2 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.

"-" = KPI not applicable to building being assessed.

BREEAM UK New Construction 2018 Assessment Report: Assessment Issue Scoring

Building name	Pant Industrial Estate - Issue 1 @ 2019-07-25
Building score (%)	55.10%
Building rating	Very Good
Minimum standards level achieved	Excellent level

MANAGEMENT

Man 01 Project brief and design

No. of BREEAM credits available	4	Available contribution to overall score	3.20%
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	3.20%
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	3.20%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Elemental LCC		2	0
Component level LCC options appraisal		1	0
Capital cost reporting	Yes	1	1
Capital cost of the project	£1,000	£/m ²	

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:

Man 03 Responsible construction practices

No. of BREEAM credits available	6	Available contribution to overall score	4.80%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	Yes

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	1	Note: The KPI dat:
Transport of construction materials and waste	No	1	0	
Exemplary level criteria - Responsible construction management	No	1	0	
Key Performance Indicators: Construction site energy use				
Energy consumption (total) - site processes	1000	kWh		
Energy consumption (intensity) - site processes	1000	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	1000	KgCO ₂ -eq		
Carbon dioxide emissions (intensity) - site processes	1000	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
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Total BREEAM credits achieved	5
Total contribution to overall building score	4.00%
Total BREEAM exemplary credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

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Man 04 Commissioning and handover

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

Assessment Criteria	Compliant?	Credits available	Credits achieved
Commissioning and testing schedule and responsibilities			
Commissioning - design and preparation			
Testing and inspecting building fabric	No	1	0
Handover - Has a Building User Guide been developed prior to handover?			
Handover - Has a training schedule been prepared for building occupiers/managers?			

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

Assessor comments/notes:

Man 05 Aftercare

Assessment issue not applicable

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

Assessment Criteria	Compliant?	Credits available	Credits achieved
Aftercare support			
Commissioning - implementation			
Post occupancy evaluation			
The client or building occupier commits funds to pay for the POE in advance			
Total BREEAM credits achieved	N/A		
Total contribution to overall building score	0.00%		
Total BREEAM exemplary credits achieved	N/A		
Minimum standard(s) level	N/A		

Assessor comments/notes:

HEALTH & WELLBEING

Hea 01 Visual Comfort

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

Assessment Criteria	Compliant?	Credits available	Credits achieved
Control of glare from sunlight		0	0
Daylighting (building type dependent)		1	0
View out	No	1	0
External lighting for Shell and core, and Shell only assessments	Yes	1	1
Exemplary level daylighting		1	0
Exemplary level criteria - Internal and external lighting levels, zoning and control		0	0
Total BREEAM credits achieved	1		
Total contribution to overall building score	1.00%		
Total BREEAM exemplary credits achieved	0		
Minimum standard(s) level	N/A		

Assessor comments/notes:

Hea 02 Indoor Air Quality

Assessment issue not applicable

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

Assessment Criteria	Compliant?	Credits available	Credits achieved
Prerequisite: Indoor air quality (IAQ) plan			
Ventilation			
Emissions from building products			
Post-construction indoor air quality measurement			
Exemplary level criteria - Emissions from building products			

Key Performance Indicators: Indoor air quality

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

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:

Hea 04 Thermal comfort

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	No

Assessment Criteria

Compliant? Credits available Credits achieved

Building Performance by Assessment Issue

25/07/2019

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Thermal modelling Design for future thermal comfort Thermal zoning and control			

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

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:

Hea 05 Acoustic Performance

No. of BREEAM credits available	1	Available contribution to overall score	1.00%
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		N/A	N/A
	Indoor ambient noise level	No	1	0
	Room acoustics		N/A	N/A

Total BREEAM credits achieved	0
Total contribution to overall building score	0.00%
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	1.00%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Security of site and building Exemplary level criteria	Yes	1	1
	No	1	0
Total BREEAM credits achieved	1		
Total contribution to overall building score	1.00%		
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	2.00%
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	2.00%
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	9	Available contribution to overall score	6.58%
No. of BREEAM exemplary credits available	N/A	Minimum standards applicable	Yes

Country of the UK where the building is located	Wales
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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	9.200	10.000	MJ/m ² yr
Building primary energy consumption			kWh/m ² yr
Building CO ₂ -eq emissions			KgCO ₂ -eq/m ² yr
Does this building contain areas that require a SAP assessment?			
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	5
Heating and cooling demand energy performance ratio (EPRdem)	0.531
Primary consumption energy performance ratio (EPRpc)	0.000
CO ₂ -eq energy performance ratio (EPRCO ₂ -eq)	0.000
Overall building energy performance ratio (EPRnc)	0.530
% improvement over building regulations (CO ₂ -eq)	0.00

Assessment criteria (exemplary credits)

Assessment criteria (exemplary credits)	Compliant?	Credits available	Credits achieved
Zero net CO ₂ -eq emissions	No		
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

Assessment criteria	Compliant?	Credits available	Credits achieved
Has a design workshop focusing on operational energy performance been carried out?			
Additional energy modelling to generate predicted operational energy consumption figures carried out?			
Predicted energy consumption targets by end use, design assumptions and input data reported?			
Risk assessment to highlight any significant design, technical, and process risks?			

Assessment criteria (exemplary credits)

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

Total BREEAM credits achieved	5
Total contribution to overall building score	3.65%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	Excellent level

Assessor comments/notes:

Ene 02 Energy monitoring

Assessment issue not applicable

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

Assessment criteria

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

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 03 External lighting

No. of BREEAM credits available	1	Available contribution to overall score	0.73%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment criteria

	Compliant?	Credits available	Credits achieved
External lighting has been designed out	No		
Is external lighting specified in accordance with the relevant criteria?	Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	0.73%
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	2.19%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment criteria Compliant? Credits available Credits achieved

Passive design analysis		1	0
Free cooling		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
	CO ₂ 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	
		%
	CO ₂ 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	1
Total contribution to overall building score	0.73%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

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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:

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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 exemplary credits available	N/A	Minimum standards applicable	N/A

Assessment criteria

	Compliant?	Credits available	Credits achieved
Energy consumption			
Energy efficient features - Lifts			
Energy efficient features - Escaltors or moving walks			

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 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	2.42%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant	Credits available	Credits achieved
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Travel plan	Yes	2	2
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Total BREEAM credits achieved	2
Total contribution to overall building score	2.42%
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	12.08%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

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

Total BREEAM credits achieved	3
Total contribution to overall building score	3.63%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

WATER

Wat 01 Water Consumption

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

Please select the calculation procedure used	Standard approach		
Credits awarded		N/A	N/A
Exemplary performance		N/A	0

Standard approach data

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

Key Performance Indicator - use of freshwater resource

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

Alternative approach data

Overall microcomponent performance level achieved	
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Total BREEAM credits achieved	N/A
Total contribution to overall building score	Missing data
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

Wat 02 Water Monitoring

No. of BREEAM credits available	1	Available contribution to overall score	1.00%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	N/A

Assessment Criteria

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			
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)			

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:

Wat 03 Water Leak Detection and Prevention

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

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
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Leak detection system	Yes	1	1
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Flow control devices		0	0
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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:

Wat 04 Water 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

Water efficient consumption	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:

MATERIALS

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

No. of BREEAM credits available	7	Available contribution to overall score	11.00%
No. of BREEAM exemplary credits available	2	Minimum standards applicable	No

Assessment Criteria

Total Mat 01 credits achieved - taken from the Mat 01/02 Results Submission Tool	Compliant?	Credits available	Credits achieved
	1	7	1

Total Exemplary credits achieved - taken from the Mat 01/02 Results Submission Tool

0

2

0

Total BREEAM credits achieved

1

Total contribution to overall building score

1.57%

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	1.57%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
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Mat 02 credit achieved - Taken from the Mat 01/02 Results Submission Tool:	1	1	1
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Total BREEAM credits achieved	1
Total contribution to overall building score	1.57%
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	6.29%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	Yes

Assessment Criteria	Compliant	Credits available	Credits achieved
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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	0.2	3	2
Exemplary level performance		1	0

Total BREEAM credits achieved	3
Total contribution to overall building score	4.71%
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	1.57%
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
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Total contribution to overall building score	1.57%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

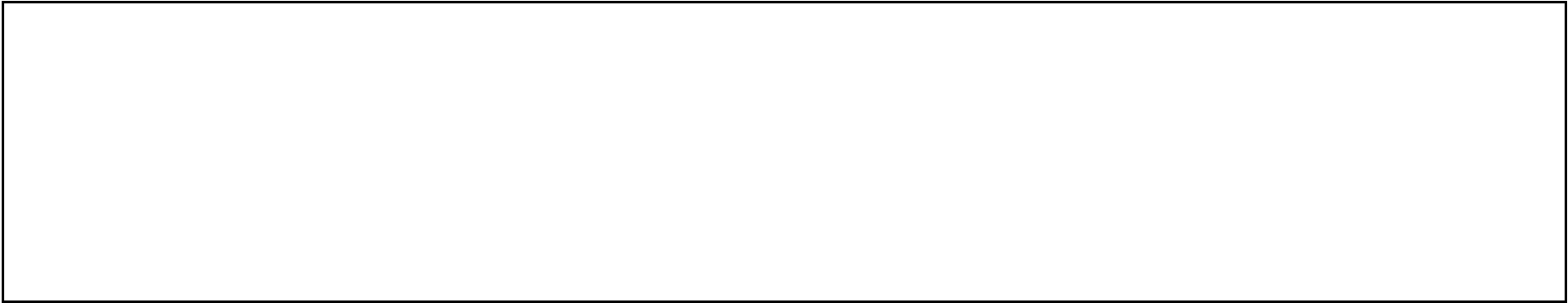
Mat 06 Material efficiency

No. of BREEAM credits available	1	Available contribution to overall score	1.57%
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	1.57%
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	3.56%
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	1
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	tonnes	
Non-hazardous construction waste (excluding demolition/excavation) - fill in to award "Construction resource efficiency" credits	6.50	tonnes/100m2
Total non-hazardous construction waste generated	6.50	tonnes
Non-hazardous non-demolition construction waste diverted from landfill - fill in to award diversion from landfill credit	80.00	%
Total non-hazardous non-demolition construction waste diverted from landfill	90.00	tonnes
Non-hazardous demolition waste diverted from landfill - fill in to award diversion of landfill credit		%

Total non-hazardous demolition waste generated		tonnes
Total non-hazardous demolition waste to disposal		tonnes
Non-hazardous excavation waste diverted from landfill - fill in to award credit		%
Material for reuse	30.00	tonnes
Material for recycling	30.00	tonnes
Material for energy recovery	30.00	tonnes
Hazardous waste to disposal	10.00	tonnes

Total BREEAM credits achieved	3
Total contribution to overall building score	2.67%
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	0.89%
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	6	1	1
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	1
Total contribution to overall building score	0.89%
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	0.89%
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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
Static waste compactor(s) or baler(s)
Vessel(s) for composting suitable organic waste and water outlet

Yes

1

1

N/A

N/A

Total BREEAM credits achieved

1

Total contribution to overall building score

0.89%

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	0.89%
No. of BREEAM exemplary credits available	N/A	Minimum standards applicable	N/A

Assessment Criteria

Resilience of structure, fabric, building services and renewables installation	Yes	1	1
Exemplary level - responding to climate change			

Total BREEAM credits achieved	1
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Total contribution to overall building score	0.89%
Total BREEAM exemplary credits achieved	N/A
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	1.78%
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	1.78%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

LAND USE & ECOLOGY

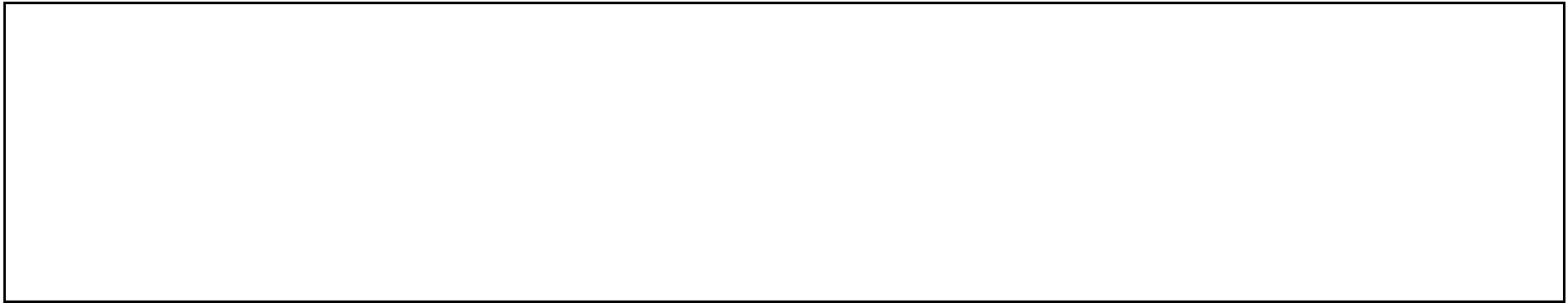
LE 01 Site Selection

No. of BREEAM credits available	2	Available contribution to overall score	2.92%
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:	10.00%	1	0
Contaminated land	No	1	0

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

Assessor comments/notes:



LE 02 Identifying and understanding the risks and opportunities for the site

No. of BREEAM credits available	2	Available contribution to overall score	2.92%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Prerequisite - Assessment route selection	Route 1		
Prerequisite - The client or contractor confirms monitoring of compliance with all relevant UK and EU or international legislation	Yes		
Survey and Evaluation	Yes	2	1
Determining the ecological outcomes of the site	Yes		
Exemplary level - Determining the ecological outcomes of the site	No	1	0
Total BREEAM credits achieved	1		
Total contribution to overall building score	1.46%		
Total BREEAM exemplary credits achieved	0		
Minimum standard(s) level	N/A		

Assessor comments/notes:

LE 03 Managing negative impacts on ecology

No. of BREEAM credits available	3	Available contribution to overall score	4.38%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Which assessment route is being followed?	Route 1		
Prerequisite - Identification and understanding the risks and opportunities for the site	Yes		
Planning, liaison and implementation	Yes	1	1
Managing negative impacts of the project	Yes	2	1
Total BREEAM credits achieved		2	
Total contribution to overall building score		2.92%	
Total BREEAM exemplary credits achieved		N/A	
Minimum standard(s) level	N/A		

Assessor comments/notes:

LE 04 Change and enhancement of ecological value

No. of BREEAM credits available	4	Available contribution to overall score	5.85%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Prerequisite - Assessment route selection	Route 1		
Prerequisite - Identification and understanding the risks and opportunities for the site	Yes		
Change and enhancement of ecology (Route 1 only)	No	1	0
Liaison, implementation and data collation (Route 2 only)		0	0
Change and enhancement of ecology (Route 2 only)		0	0
Exemplary level criteria (Route 2 only)		0	0

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:

LE 05 Long term ecology management and maintenance

No. of BREEAM credits available	2	Available contribution to overall score	2.92%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

		Compliant?	Credits available	Credits achieved
Prerequisite - Assessment route selection		Route 1		
Prerequisite - Roles and responsibilities, implementation, statutory obligations		Yes		
Liaison, monitoring implementation, evolving management and maintenance solutions		Yes		
Landscape and ecology management plan development		Yes	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	1.46%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

POLLUTION

Pol 01 Impact of refrigerants

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
Refrigerant containing systems installed in the assessed building?		2	0
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?			
Total Direct Effect Life Cycle CO ₂ -eq/kW emissions from the system			
Global Warming Potential of the specified refrigerant(s) 10 or less?			

Leak Detection

Are all the systems hermetically sealed?		1	0
BREEAM compliant automatic refrigerant leak detection system installed and able to manage the remaining refrigerant charge			

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:

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Pol 02 Local air quality**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
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?			

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:

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Pol 03 Flood and surface water management

No. of BREEAM credits available	5	Available contribution to overall score	5.00%
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	5.00%
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	1.00%
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	1.00%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

 Assessor comments/notes:

Pol 05 Reduction of noise pollution

Assessment issue not applicable

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

Assessment Criteria	Compliant	Credits available	Credits achieved
Noise-sensitive areas/buildings within 800m radius of the development			

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:

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
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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	1	0
Hea 02 Indoor Air Quality	N/A	N/A	N/A
Hea 06 Security	No	1	0
Ene 01 Reduction of energy use and carbon emissions	N/A	N/A	N/A
Wat 01 Water Consumption	N/A	N/A	N/A
Mat 01 Environmental impacts from construction products - Building LCA	No	2	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	N/A	N/A	N/A
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?

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

Assessor comments/notes:

Pant Industrial Estate, Merthyr Tydfil

TYPICAL SMALL UNIT

BREEAM_UK_NC_2018_Assessment_Scoring_and_Reporting_Tool_v2.6_Issue 2 @ 2019-09-04

BREEAM UK New Construction 2018 Assessment Report



General information

BRE Assessment reference no.	x
Client name	x
Building end user/occupier	x
Assessor name	Wendy Lake
Assessors role	Assessor
Assessor organisation	Elma Sustain

Building details

Building name	TYPICAL SMALL UNIT - Pant Industrial Estate - Issue 2 @ 2019-09-04
Building address	Merthyr Tydfil
County	Merthyr
Post code	
Country	Wales
BREEAM scheme	New Construction
BREEAM version	2018 (SD5078)
BREEAM UK 2018 technical manual issue number	SD5078 Issue 2.0
Project scope	Shell and core
Building type (main description)	Industrial
Building type (sub-group)	Industrial - Process, manufacturing or vehicle servicing
Does this healthcare building have inpatient areas?	
Does this industrial building have an office area, or other occupied spaces?	No
Assessment stage	Design (interim)
Building floor area (GIA) m ²	1000
Building floor area (NIFA) m ²	1000
Is the building designed to be untreated?	No
Building services - heating system type	None
Building services - cooling system type	None
Are commercial or industrial-sized refrigeration and storage systems specified?	No
Are building user lifts present?	No
Are building user escalators or moving walks present?	No
Are laboratories present?	No
What percentage of total building area do laboratories represent?	
Are there fume cupboard(s) and/or other containment devices present?	
Are there any water demands present other than those assessed in Wat 01?	No
Does the building have external areas within the boundary of the assessed development?	Yes
Are there statutory requirements, or other issues outside of the control of the project, that impact the ability to provide outdoor space?	No
Are there any systems specified that contribute to the unregulated energy load?	No
Are the post-occupancy stage credits targeted in Ene 01?	No

Project team details

Developer	
Principal contractor	
Architect	
Project management	
Building services	
BREEAM Accredited Professional	
Other project team member 1	
Other project team member 2	
Other project team member 3	
Other project team member 4	

BREEAM assessor declaration of assessment accuracy and quality

I, Wendy Lake, a qualified BREEAM assessor working on behalf of Elma Sustain confirm that the content of this report is to the best of my knowledge a true and accurate reflection of the performance of the above named building, as measured against the assessment criteria and reporting requirements of the BREEAM Scheme Document (SD5078). Furthermore, I confirm that this assessment and the information on which it is based has been checked and verified in accordance with BRE Global Ltd's UKAS accredited BREEAM operating procedures for BREEAM assessments and assessors, as described in the technical scheme document (SD5078) and associated BREEAM operational documents.

BREEAM Assessor Signature:

Wendy Lake

Date

04/09/2019

Disclaimer

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Disclaimer

Conflict of interest - Where an assessor is employed by the same company as a project/design team member(s) (e.g. energy assessor, suitably qualified ecologist or client representative etc) they must identify and manage any potential conflicts of interest and inform BRE Global Ltd as soon as they become aware of such a conflict. Where possible this should be made clear to BREEAM upon registration of the assessment.

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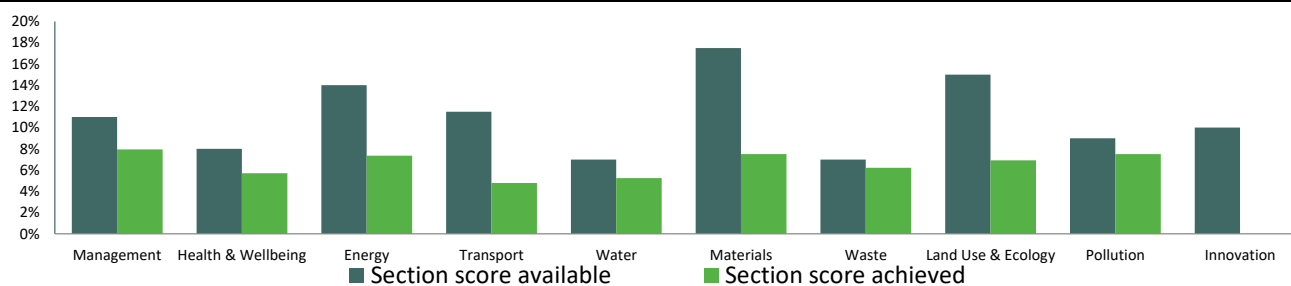
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Overall Building Performance

Building name	TYPICAL SMALL UNIT - Pant Industrial Estate - Issue 2 @ 2019-09-04
BREEAM rating	Very Good
Total Score	59.20%
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	18	13	72.22%	11.00%	7.94%
Health & Wellbeing	7	5	71.43%	8.00%	5.71%
Energy	19	10	52.63%	14.00%	7.36%
Transport	12	5	41.67%	11.50%	4.79%
Water	8	6	75.00%	7.00%	5.25%
Materials	14	6	42.86%	17.50%	7.50%
Waste	9	8	88.89%	7.00%	6.22%
Land Use & Ecology	13	6	46.15%	15.00%	6.92%
Pollution	12	10	83.33%	9.00%	7.50%
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	24.50	kWh/m ² /yr	24500	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	900.00	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	0.2	%	-	-
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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

- 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).
- 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.
- 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.
- The reported impact covers 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.
- 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.
- 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.
- The reported impact covers emissions from either one or a combination of space heating, cooling and hot water heating (refer to PolO2 Assessment Issue for scope of emissions)
- 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)).
- 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.
- 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.
- 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.
- 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.
- 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).
- 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.

"-" = KPI not applicable to building being assessed.

BREEAM UK New Construction 2018 Assessment Report: Assessment Issue Scoring



Building name	TYPICAL SMALL UNIT - Pant Industrial Estate - Issue 2 @ 2019-09-04
Building score (%)	59.20%
Building rating	Very Good
Minimum standards level achieved	Excellent level

MANAGEMENT

Man 01 Project brief and design

No. of BREEAM credits available	4	Available contribution to overall score	2.44%
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		2.44%	
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	2.44%
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			2	0
			1	0
	Yes		1	1
	£1,000		£/m ²	
Total BREEAM credits achieved	1			
Total contribution to overall building score	0.61%			
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	3.67%
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	1	Note: The KPI data is not available for this criterion.
Transport of construction materials and waste	No	1	0	
Exemplary level criteria - Responsible construction management	No	1	0	

Key Performance Indicators: Construction site energy use

Energy consumption (total) - site processes	1000	kWh
Energy consumption (intensity) - site processes	1000	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	1000	KgCO ₂ -eq
Carbon dioxide emissions (intensity) - site processes	1000	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	3.06%
Total BREEAM exemplary credits achieved	0
Minimum standard(s) level	Outstanding level

Assessor comments/notes:

Man 04 Commisioning and handover

No. of BREEAM credits available	4	Available contribution to overall score	2.44%
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	No	1	0
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		3	
Total contribution to overall building score		1.83%	
Total BREEAM exemplary credits achieved		N/A	
Minimum standard(s) level	Outstanding level		

Assessor comments/notes:

Man 05 Aftercare

Assessment issue not applicable

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

Assessment Criteria	Compliant?	Credits available	Credits achieved
Aftercare support			
Commissioning - implementation			
Post occupancy evaluation			
The client or building occupier commits funds to pay for the POE in advance			
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:

HEALTH & WELLBEING

Hea 01 Visual Comfort

No. of BREEAM credits available	3	Available contribution to overall score	3.43%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Control of glare from sunlight		0	0
Daylighting (building type dependent)		1	0
View out	No	1	0
External lighting for Shell and core, and Shell only assessments	Yes	1	1
Exemplary level daylighting		1	0
Exemplary level criteria - Internal and external lighting levels, zoning and control		0	0
Total BREEAM credits achieved	1		
Total contribution to overall building score	1.14%		
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	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
Prerequisite: Indoor air quality (IAQ) plan			
Ventilation			
Emissions from building products			

Post-construction indoor air quality measurement			
Exemplary level criteria - Emissions from building products			

Key Performance Indicators: Indoor air quality

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

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

Assessor comments/notes:

Hea 04 Thermal comfort

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	No

Assessment Criteria

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

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

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:

Hea 05 Acoustic Performance

No. of BREEAM credits available	1	Available contribution to overall score	1.14%
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		N/A	N/A
Indoor ambient noise level	Yes	1	1
Room acoustics		N/A	N/A

Total BREEAM credits achieved	1
Total contribution to overall building score	1.14%
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	1.14%
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	1.14%

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	2.29%
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	2.29%
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	9.58%
No. of BREEAM exemplary credits available	5	Minimum standards applicable	Yes

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

	Actual	Notional	
Photovoltaic systems	6.850	6.360	kWh/m ²
Wind turbines	0.000	0.000	kWh/m ²
CHP generators	0.000	0.000	kWh/m ²
Solar thermal systems	0.000	0.000	kWh/m ²
Building energy demand	185.550	246.000	MJ/m ² yr
Building primary energy consumption	131.450	159.090	kWh/m ² yr

Building CO ₂ -eq emissions	20.500	24.500	KgCO ₂ -eq/m ² yr
Does this building contain areas that require a SAP assessment?			
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)	0.301
Primary consumption energy performance ratio (EPRpc)	0.173
CO ₂ -eq energy performance ratio (EPRCO ₂ -eq)	0.171
Overall building energy performance ratio (EPRnc)	0.645
% improvement over building regulations (CO ₂ -eq)	16.33%

Assessment criteria (exemplary credits)

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

Assessment criteria	Compliant?	Credits available	Credits achieved
Has a design workshop focusing on operational energy performance been carried out?	Please select		
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?			

Assessment criteria (exemplary credits)

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	4.42%
Total BREEAM exemplary credits achieved	0
Minimum standard(s) level	Excellent level

Assessor comments/notes:

SMALL UNIT

Ene 02 Energy monitoring

No. of BREEAM credits available	2	Available contribution to overall score	1.47%
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	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	Outstanding level

Assessor comments/notes:

Ene 03 External lighting

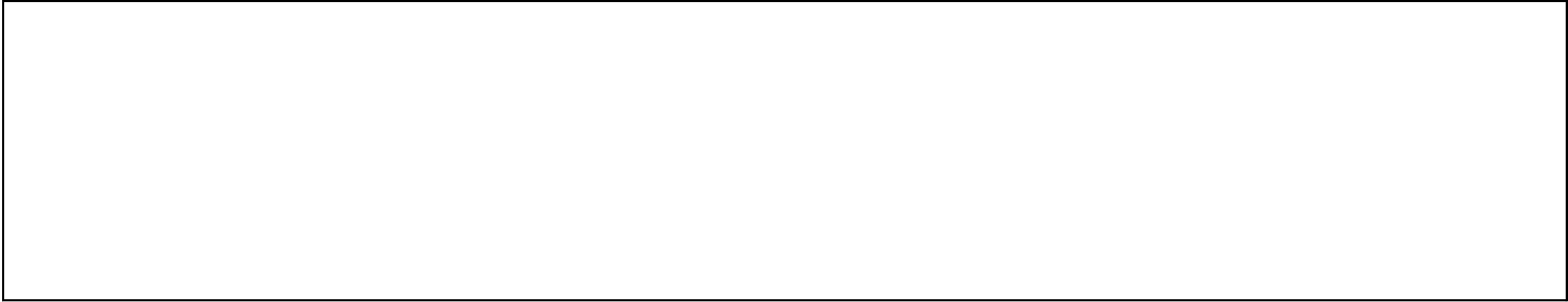
No. of BREEAM credits available	1	Available contribution to overall score	0.74%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment criteria

	Compliant?	Credits available	Credits achieved
External lighting has been designed out	No		
Is external lighting specified in accordance with the relevant criteria?	Yes	1	1

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

Assessment criteria	Compliant?	Credits available	Credits achieved
Passive design analysis		1	0
Free cooling		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	1
Total contribution to overall building score	0.74%
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

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
Energy consumption			
Energy efficient features - Lifts			
Energy efficient features - Escaltors or moving walks			

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 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			

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	1.92%
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	1.92%
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	9.58%
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	2.88%
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	4.38%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	Yes

Assessment Criteria	Compliant?	Credits available	Credits achieved
Are all the components specified and installed by the tenant not the developer?	No		
Please select the calculation procedure used	Standard approach		
Credits awarded	3	5	3
Exemplary performance		1	0

Standard approach data

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

Key Performance Indicator - use of freshwater resource

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

Alternative approach data

Overall microcomponent performance level achieved	
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Total BREEAM credits achieved	3
Total contribution to overall building score	2.63%

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	0.88%
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)			

Total BREEAM credits achieved	1
Total contribution to overall building score	0.88%
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	1.75%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
Leak detection system	Yes	1	1
Flow control devices	Yes	1	1

Total BREEAM credits achieved	2
Total contribution to overall building score	1.75%

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

Assessor comments/notes:

Wat 04 Water 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

Compliant?

Credits available

Credits achieved

Water efficient consumption			
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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:

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

No. of BREEAM credits available	7	Available contribution to overall score	8.75%
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	1	7	1
Total Exemplary credits achieved - taken from the Mat 01/02 Results Submission Tool	0	3	0

Total BREEAM credits achieved	1
Total contribution to overall building score	1.25%
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	1.25%
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	1.25%
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	5.00%
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	Superstructure		
Percentage of available for percentage of RSM points achieved	0.2	3	1
Exemplary level performance		1	0

Total BREEAM credits achieved	2
Total contribution to overall building score	2.50%
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	1.25%
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		1.25%	
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	1.25%
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No. of BREEAM exemplary credits available	0	Minimum standards applicable	No
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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	1.25%
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	3.11%
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	1
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	tonnes	
Non-hazardous construction waste (excluding demolition/excavation) - fill in to award "Construction resource efficiency" credits	6.50	tonnes/100m2
Total non-hazardous construction waste generated	6.50	tonnes
Non-hazardous non-demolition construction waste diverted from landfill - fill in to award diversion from landfill credit	80.00	%
Total non-hazardous non-demolition construction waste diverted from landfill	90.00	tonnes
Non-hazardous demolition waste diverted from landfill - fill in to award diversion of landfill credit		%
Total non-hazardous demolition waste generated		tonnes
Total non-hazardous demolition waste to disposal		tonnes
Non-hazardous excavation waste diverted from landfill - fill in to award credit		%
Material for reuse	30.00	tonnes
Material for recycling	30.00	tonnes
Material for energy recovery	30.00	tonnes
Hazardous waste to disposal	10.00	tonnes

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:

Wst 02 Use of recycled and sustainably sourced aggregates

No. of BREEAM credits available	1	Available contribution to overall score	0.78%
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	6	1	1
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	1
Total contribution to overall building score	0.78%
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	0.78%
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		

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:

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	0.78%
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		1	0

Total BREEAM credits achieved	1
Total contribution to overall building score	0.78%
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	1.56%
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	1.56%
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	2.31%
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:	100.00%	1	1
Contaminated land	Yes	1	1

Total BREEAM credits achieved	2
Total contribution to overall building score	2.31%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

LE 02 Identifying and understanding the risks and opportunities for the site

No. of BREEAM credits available	2	Available contribution to overall score	2.31%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Prerequisite - Assessment route selection	Route 1		
Prerequisite - The client or contractor confirms monitoring of compliance with all relevant UK and EU or international legislation	Yes		
Survey and Evaluation	Yes	2	1
Determining the ecological outcomes of the site	Yes		
Exemplary level - Determining the ecological outcomes of the site	No	1	0
Total BREEAM credits achieved	1		
Total contribution to overall building score	1.15%		
Total BREEAM exemplary credits achieved	0		
Minimum standard(s) level	N/A		

Assessor comments/notes:

LE 03 Managing negative impacts on ecology

No. of BREEAM credits available	3	Available contribution to overall score	3.46%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria	Compliant?	Credits available	Credits achieved
Which assessment route is being followed?	Route 1		
Prerequisite - Identification and understanding the risks and opportunities for the site	Yes		
Planning, liaison and implementation	Yes	1	1
Managing negative impacts of the project	Yes	2	1

Total BREEAM credits achieved	2
Total contribution to overall building score	2.31%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

LE 04 Change and enhancement of ecological value

No. of BREEAM credits available	4	Available contribution to overall score	4.62%
No. of BREEAM exemplary credits available	1	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Prerequisite - Assessment route selection	Route 1		
Prerequisite - Identification and understanding the risks and opportunities for the site	Yes		
Change and enhancement of ecology (Route 1 only)	No	1	0
Liaison, implementation and data collation (Route 2 only)		0	0
Change and enhancement of ecology (Route 2 only)		0	0
Exemplary level criteria (Route 2 only)		0	0

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:

LE 05 Long term ecology management and maintenance

No. of BREEAM credits available	2	Available contribution to overall score	2.31%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

Assessment Criteria	Compliant?	Credits available	Credits achieved
Prerequisite - Assessment route selection	Route 1		
Prerequisite - Roles and responsibilities, implementation, statutory obligations	Yes		
Liaison, monitoring implementation, evolving management and maintenance solutions	Yes		
Landscape and ecology management plan development	Yes	1	1

Total BREEAM credits achieved	1
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Total contribution to overall building score	1.15%
Total BREEAM exemplary credits achieved	N/A
Minimum standard(s) level	N/A

Assessor comments/notes:

POLLUTION

Pol 01 Impact of refrigerants

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

Assessment Criteria	Compliant?	Credits available	Credits achieved
Refrigerant containing systems installed in the assessed building?	Yes	2	1
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	900	kgCO ₂ eq/kW heating and cooling capacity	
Global Warming Potential of the specified refrigerant(s) 10 or less?	No		

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	2
Total contribution to overall building score	1.50%
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	1.50%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

		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?	1	2	1
Total BREEAM credits achieved	1		
Total contribution to overall building score	0.75%		
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	3.75%
No. of BREEAM exemplary credits available	0	Minimum standards applicable	No

Assessment Criteria

	Compliant?	Credits available	Credits achieved
	Yes		
Has a site-specific flood risk assessment been conducted? 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	3.75%
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	0.75%
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	0.75%
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	0.75%
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	No	1	1

Total BREEAM credits achieved	1
Total contribution to overall building score	0.75%
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	1	0
Hea 02 Indoor Air Quality	N/A	N/A	N/A
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: