

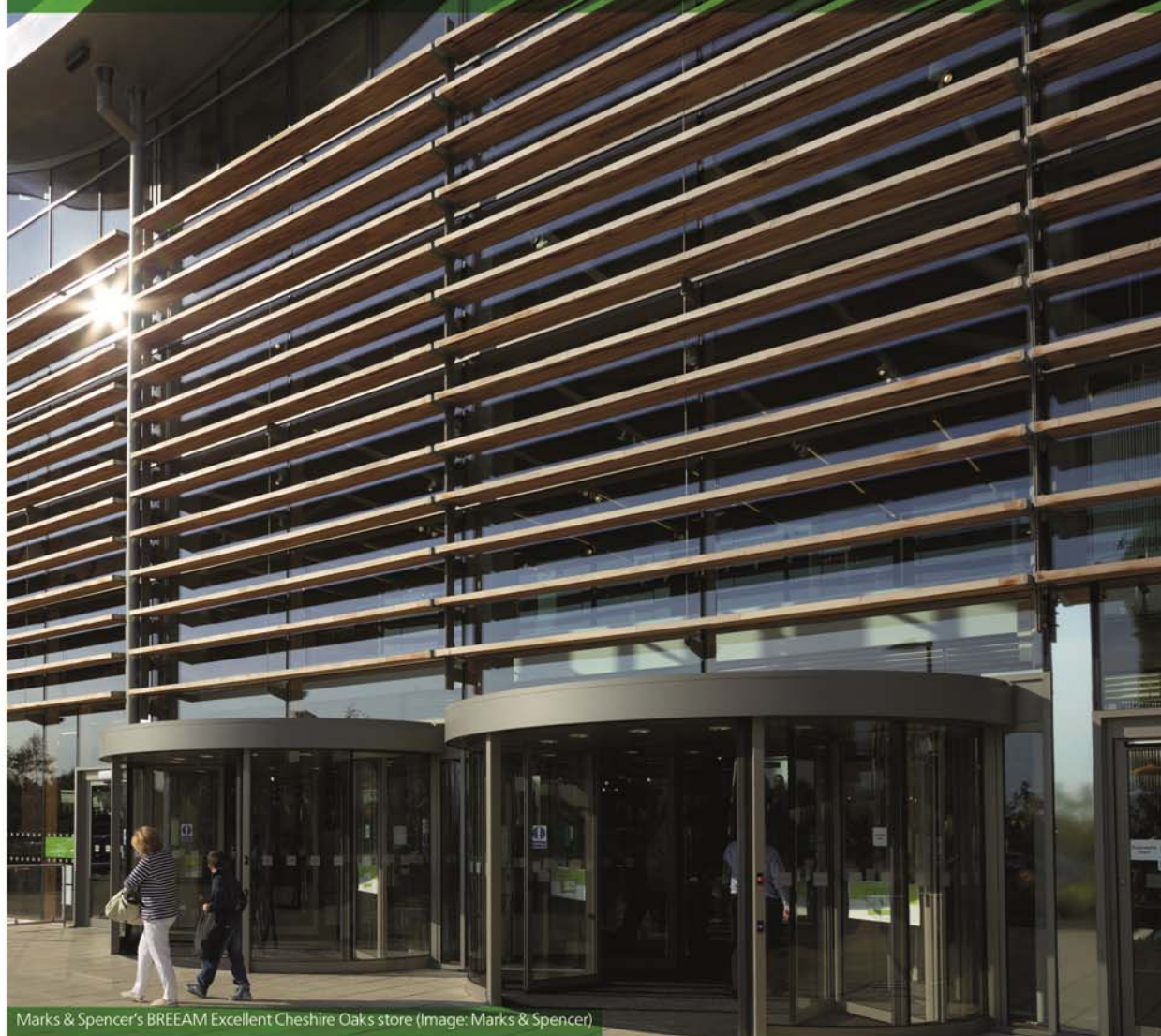
BREEAM New Construction 2018

BOUNDARY LAKES CLUBHOUSE

Pre-assessment

BOUNDARY LAKES CLUBHOUSE

29 September 2023 Assessment report



Marks & Spencer's BREEAM Excellent Cheshire Oaks store (Image: Marks & Spencer)

Assessment references

Registration number:	BREEAM-0117-3822	Date created:	29/9/2023
Created by:	Naomi Sadler		

Site details

Site name:	BOUNDARY LAKES CLUBHOUSE
Address:	The Ageas Bowl, Botley Road
Town:	Southampton
County:	Hampshire
Postcode:	SO30 3XH
Country:	United Kingdom

Certificate details

The certificate will have the name of the architect (if entered above) and the name of the developer (from above).

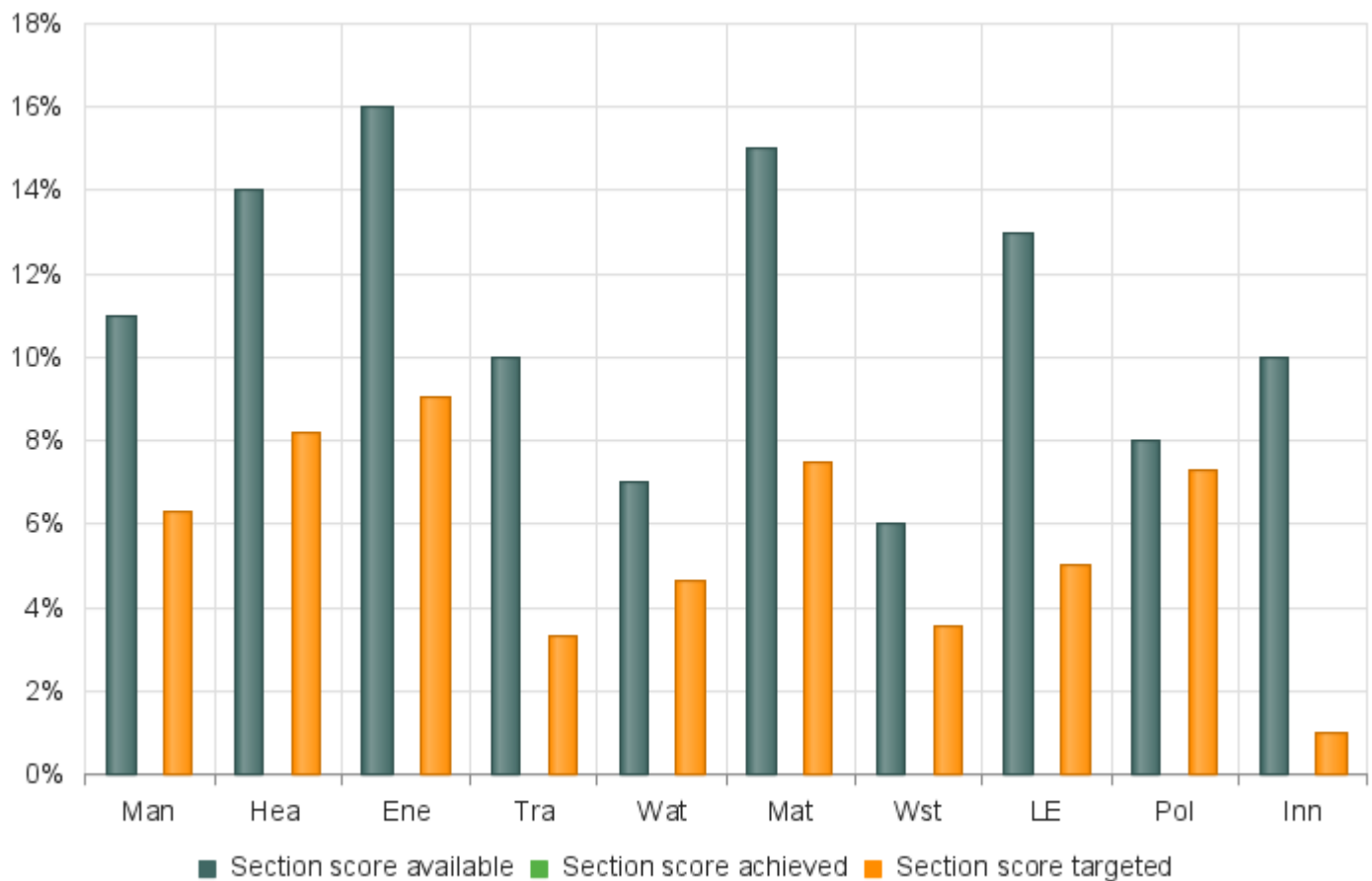
Any other names to appear on the certificate are listed below:

Name	Label
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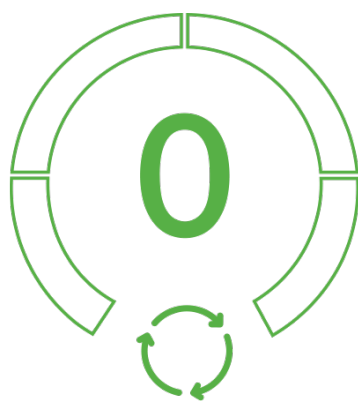
BREEAM Rating

	Credits available	Credits achieved	Credits targeted	% Credits achieved	Weighting	Category score	Target score
Man	21.0	0.0	12.0	0.00%	11.00%	0.00%	6.28%
Hea	17.0	0.0	10.0	0.00%	14.00%	0.00%	8.23%
Ene	23.0	0.0	13.0	0.00%	16.00%	0.00%	9.04%
Tra	12.0	0.0	4.0	0.00%	10.00%	0.00%	3.33%
Wat	9.0	0.0	6.0	0.00%	7.00%	0.00%	4.66%
Mat	14.0	0.0	7.0	0.00%	15.00%	0.00%	7.50%
Wst	10.0	0.0	6.0	0.00%	6.00%	0.00%	3.59%
LE	13.0	0.0	5.0	0.00%	13.00%	0.00%	5.00%
Pol	11.0	0.0	10.0	0.00%	8.00%	0.00%	7.27%
Inn	10.0	0.0	1.0	0.00%	10.00%	0.00%	1.00%
Total	140.0	0.0	74.0	0.00%	-	0.00%	55.93%
Rating	-	-	-	-	-	Unclassified	Very Good

Performance by environmental category



Indicator scores



Circularity



Wellbeing



Whole Life Carbon

More information (<https://www.breeam.com/news/new-breeam-indicators-to-be-added-to-breeam/>) about the BREEAM indicator scores

Issue scores

Please Note: X means the exemplary credit for the relevant issue

Management

Man 01 Project Brief and design

0 / 4

Man 02 Life cycle cost and service life planning

0 / 4

Man 03 Responsible construction practices

0 / 6 X: 0 / 1

Man 04 Commissioning and handover

0 / 4

Man 05 Aftercare

0 / 3

Health and Wellbeing

Hea 01 Visual comfort

0 / 4 X: 0 / 2

Hea 02 Indoor air quality

0 / 4 X: 0 / 1

Hea 04 Thermal comfort

0 / 3

Hea 05 Acoustic performance

0 / 3

Hea 06 Security

0 / 1 X: 0 / 1

Hea 07 Safe and Healthy Surroundings

0 / 2

Energy

Ene 01 Reduction of energy use and carbon emissions

0 / 13 X: 0 / 5

Ene 02 Energy monitoring

0 / 2

Ene 03 External lighting

0 / 1

Ene 05 Energy efficient cold storage

0 / 2

Ene 07 Energy efficient laboratory systems

N/A

Ene 04 Low carbon design

0 / 3

Ene 06 Energy efficient transportation systems

0 / 2

Ene 08 Energy efficient equipment

N/A

Transport

Tra 01 Transport assessment and travel plan

0 / 2

Tra 02 Sustainable transport measures

0 / 10

Water

Wat 01 Water consumption

0 / 5 X: 0 / 1

Wat 03 Water leak detection

0 / 2

Wat 02 Water monitoring

0 / 1

Wat 04 Water efficient equipment

0 / 1

Materials

Mat 01 Life cycle impacts

0 / 7 X: 0 / 3

Mat 02 Environmental impacts from construction products

0 / 1

Mat 03 Responsible sourcing

0 / 4 X: 0 / 1

Mat 05 Designing for durability and resilience

0 / 1

Mat 06 Material efficiency

0 / 1

Waste

Wst 01 Construction waste management

0 / 5 X: 0 / 1

Wst 02 Use of recycled and sustainably sourced aggregates

0 / 1 X: 0 / 1

Wst 03 Operational waste

0 / 1

Wst 04 Speculative finishes (Offices only)

N/A

Wst 05 Adaptation to climate change

0 / 1 X: 0 / 1

Wst 06 Design for disassembly and adaptability

0 / 2

Land use and ecology

LE 01 Site selection

0 / 2

LE 02 Ecological risks and opportunities

0 / 2 X: 0 / 1

LE 03 Managing impacts on ecology

0 / 3

LE 04 Ecological change and enhancement

0 / 4 X: 0 / 1

LE 05 Long term ecology
management and
maintenance

0 / 2

Pollution

Pol 01 Impact of refrigerants

0 / 3

Pol 02 Local air quality

0 / 2

Pol 03 Flood risk
management and reducing
surface water run-off

0 / 5

Pol 04 Reduction of Night
Time Light Pollution

0 / 1

Pol 05 Noise attenuation

N/A

Innovation

Inn 01 Innovation

0 / 0 X: 0 / 10

Initial details

The Ageas Bowl, Botley Road

Technical manual issue number :

Project scope : Fully fitted

Building type (main description) : Assembly and leisure

Sub-group : Indoor or outdoor sports, fitness and recreation centre (with or without pool)

Assessment stage : Design (interim)

Building floor area (GIA) :

Building floor area (NIFA) :

Is the building designed to be untreated? :

Does the building have external areas within the boundary of the assessed development? :
Yes

Are commercial or industrial-sized refrigeration and storage systems specified? : Yes

Are building user lifts present? : Yes

Are building user escalators or moving walks present? : No

Are there any water demands present other than those assessed in Wat 01? : 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 issue? : Yes

Are laboratories present? : No

Are there fume cupboard(s) and/or other containment devices present? : No

Category assessment

Management (Man)

Man 01 Project Brief and design

To optimise final building design through recognising and encouraging an integrated design process and robust stakeholder engagement.

Assessment criteria

Stakeholder consultation (interested parties) :

Project delivery planning :

Prerequisite: Have the client and the contractor formally agreed performance targets? :

Credits awarded : 0

Comments :

This issue is split into three parts: 1. Project delivery planning (one credit) 2. Stakeholder consultation (one credit) 3. BREEAM Advisory Professional (AP) (two credits). The developer has identified and defined for each key phase of project delivery: 1.a: Roles 1.b: Responsibilities 1.c: Contributions. Considering: 2.a: End user requirements 2.b: Aims of the design and design strategy 2.c: Particular installation and construction requirements or limitations 2.d: Occupiers' budget and technical expertise in maintaining any proposed systems 2.e: Maintainability and adaptability of the proposals 2.f: Operational energy (see Ene 01 Reduction of energy use and carbon emissions) 2.g: Requirements for the production of project and end user documentation 2.h: Requirements for commissioning, training and aftercare support. The developer will consult prior to planning with all members of the stakeholders to discuss the brief and concept design.

Man 02 Life cycle cost and service life planning

To promote the business case for sustainable buildings and to deliver whole life value by encouraging the use of life cycle costing to improve design, specification, through-life maintenance and operation.

Assessment criteria

Elemental LCC :

Component level LCC options appraisal :

Capital cost reporting :

Capital cost of the project :

Credits awarded : 0

Comments :

This issue is split into three parts: 1. Elemental life cycle cost (LCC) (two credits) 2. Component level life options appraisal (one credit) 3. Capital cost reporting (one credit). The developer has a QS who will assess the proposed development meeting the BREEAM criteria.

Man 03 Responsible construction practices

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

Assessment criteria

Prerequisite: Are all timber and timber-based products used during the construction process of the project 'legally harvested and traded timber'? :
Environmental management :

Prerequisite: Have the client and the contractor formally agreed performance targets? :

Responsible construction management : 0

Monitoring of construction site impacts :

Key Performance Indicators: Construction site energy use

Energy consumption (total) - site processes :

Energy consumption (intensity) - site processes :

Key Performance Indicators: Construction site greenhouse gas emissions

Process greenhouse gas emissions (total) - site processes :

Carbon dioxide emissions (intensity) - site processes :

Credits awarded : 0

Comments :

All timber and timber-based products used during the construction process of the project are legal and sustainable timber. The developer will also monitor construction site impacts for the utility consumption for energy and water consumption. The developer will also set targets for transportation movements and impacts resulting from delivery of the majority of construction materials to site and construction waste from site . They will also monitor and record the transportation movements and report using the BREEAM benchmarks.

Man 04 Commissioning and handover

To encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.

Assessment criteria

Commissioning testing schedule and responsibilities :

Handover - have a technical and a non-technical building user guide been developed prior to handover? :

Handover - have a technical and a non-technical training schedule been prepared around handover? :

Credits awarded : 0

Comments :

The developer will prepare a schedule of commissioning and testing and during the design stage the client will appoint a team member to: - Undertaking design reviews and giving advice on suitability for ease of commissioning. - Providing commissioning management input to construction programming and during installation stages. - Management of commissioning, performance testing and handover or post-handover stages.

Man 05 Aftercare

To ensure the building operates in accordance with the design intent and operational demands, through providing aftercare to the building owner and occupants during the first year of occupation.

Assessment criteria

Is this a speculative development? :

Aftercare support :

Commissioning - implementation :

Post occupancy evaluation :

The client or building occupier commits funds to pay for the POE in advance. :

Credits awarded : 0

Comments :

his issue is split into three parts: 1. Aftercare support (one credit) - The developer will provide aftercare support and provide aftercare training including reviewing the building user guide (BUG). 2. Commissioning - implementation (one credit) - The developer will provide a commissioning schedule of all building services, agree with building user, test and if necessary re-test. 3. Post-Occupancy Evaluation (POE) (one credit) - The client or building occupier commits to carry out a POE exercise one year after the building is substantially occupied. This gains comprehensive in-use performance feedback.

Health and Wellbeing (Hea)

Hea 01 Visual comfort

To encourage best practice in visual performance and comfort by ensuring daylighting, artificial lighting and occupant controls are considered.

Assessment criteria

Control of glare from sunlight :

Daylighting (building type dependent) : 0

View Out :

Internal and external lighting levels, zoning and controls :

Exemplary level criteria- Internal and external lighting levels, zoning and control :

Credits awarded : 0

Comments :

This issue is split into four parts: 1. Control of glare from sunlight (one credit) - The developer will conduct a glare control strategy. 2. Daylighting (up to two credits - building type dependent) 3. View out (one credit all buildings, two credits healthcare buildings with inpatient areas) 4. Internal and external lighting levels, zoning and control (one credit). - Internal lighting in all relevant areas of the building is designed to provide illuminance (lux) levels and colour rendering index in accordance with the SLL Code for Lighting 20121 and any other relevant industry standard. Internal lighting should be appropriate to the tasks undertaken, accounting for building user concentration and comfort levels.

Hea 02 Indoor air quality

To encourage and support healthy internal environments with good indoor air quality.

Assessment criteria

Pre requisite: Indoor air quality (IAQ) plan :

Ventilation :

Emissions from building products : 0

Post-construction indoor air quality measurement :

Exemplary level criteria- Emissions from building products :

Key Performance Indicators

Total volatile organic compound (TVOC) concentration :

Formaldehyde concentration :

Credits awarded : 0

Comments :

This issue is split into four parts: 1. Indoor air quality (prerequisite) - The developer will completed an air quality assessment. 2. Ventilation (one credit) 3. Emissions from construction products (up to two credits) 4. Post-construction indoor air quality measurement (one credit). - The developer will carry out pre-occupation testing to comply with the IAQA.

Hea 04 Thermal comfort

To ensure the building is capable of providing an appropriate level of thermal comfort.

Assessment criteria

Thermal modelling :

Design for future thermal comfort :

Thermal zoning and controls :

Key Performance Indicators

PMV and PPD Indices :

Credits awarded : 0

Comments :

This issue is split into three parts: 1. Thermal modelling (one credit) - The developer will complete thermal modelling has been using software in accordance with CIBSE AM111 Building Energy and Performance Modelling to advise on heating, cooling etc. 2. Design for future thermal comfort (one credit) 3. Thermal zoning and controls (one credit) - The thermal modeling strategy for proposed heating or cooling systems demonstrates that it has addressed the following: a: Zones within the building, and how the building services could efficiently and appropriately heat or cool these areas. For example consider the different requirements for the central core of a building compared with the external perimeter adjacent to the windows. b: The degree of occupant control required for these zones. This is based on discussions with the end user (or alternatively building type or use specific design guidance, case studies, feedback)

Hea 05 Acoustic performance

To ensure the building is capable of providing an appropriate acoustic environment to provide comfort for building users.

Assessment criteria

Criteria performance requirements or SQA bespoke requirements? :

Sound insulation : 0

Indoor ambient noise level :

Room acoustics :

Credits awarded : 0

Comments :

The developer will appoint a suitably qualified acoustician. The building will meet the appropriate acoustic performance standards and testing requirements defined in the relevant table below. These tables define criteria for the acoustic principles of: 1.a: Sound insulation 1.b: Indoor ambient noise level 1.c: Room acoustics.

Hea 06 Security

To encourage the planning and implementation of effective measures that provide an appropriate level of security to the building and site.

Assessment criteria

Security of site and building :

Exemplary level criteria :

Credits awarded : 0

Comments :

A Suitably Qualified Security Specialist (SQSS) will provide an evidence-based Security needs assessment (SNA) and highlighted recommendations will be adopted into the design.

Hea 07 Safe and Healthy Surroundings

To encourage the provision of safe access around the site and outdoor space that enhances

the wellbeing of building users. .

Assessment criteria

Safe Access :

Outside Space :

Credits awarded : 0

Comments :

Once credit has been awarded for an outside space providing building users with an external amenity area.

Energy (Ene)

Ene 01 Reduction of energy use and carbon emissions

To minimise operational energy demand, primary energy consumption and CO₂ emissions.

Energy performance

Country :

Can a .inp file be uploaded? :

Without the .inp file being uploaded only the standard methodology can be used. This may impact the number of credits that can be awarded. :

Energy Production by Technology :

Photovoltaic systems (Actual) :

Photovoltaic systems (Notional) :

Wind turbines (Actual) :

Wind turbines (Notional) :

CHP generators (Actual) :

CHP generators (Notional) :

Solar thermal systems (Actual) :

Solar thermal systems (Notional) :

Energy & CO₂ Emissions Summary :

Actual building energy demand :

Notional building energy demand :

Actual building primary energy consumption :

Notional building primary energy consumption :

Actual building CO₂-eq emissions (BER) :

Notional building CO₂-eq emissions (TER) :

Towards carbon negative (exemplary credits)

Zero net CO₂-eq emissions :

Energy performance - Building score

Heating and cooling demand energy performance ratio (EPR_{dem}) :

Primary consumption energy performance ratio (EPR_{pc}) :

Total BREEAM credits achieved : 0.0

CO₂-eq energy performance ratio (EPR_{co2-eq}) :

Overall building energy performance ratio (EPR_{nc}) :

% improvement BER/TER :

Prediction of operational energy consumption

Has a design workshop focusing on operational energy performance been carried out? :

Has the operational energy performance of the building been substantially improved? :

Post-occupancy stage (exemplary credits)

Maximum credits achieved in Ene 02 Energy monitoring? : No

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? :

Credits awarded : 0

Comments :

The developer has appointed SEES to complete an SBEM assessment with the view to reduce emissions by at least 15% over building regulation. The building will achieve an EPR of 0.5

Ene 02 Energy monitoring

To encourage the installation of energy sub-metering that facilitates the monitoring of operational energy consumption. To enable managers and consultants post-handover to compare actual performance with targets in order to inform ongoing management and help in reducing the performance gap.

Assessment criteria

Sub-metering of end use categories :

Sub-metering of high energy load and tenancy areas :

Credits awarded : 0

Comments :

This issue is split into two parts: 1. Sub-metering of end-use categories (one credit) - an energy monitoring and management system or separate accessible energy sub-meters with pulsed or other open protocol communication outputs, for future connection to an energy monitoring and management system will be provided. 2. Sub-metering of high energy load and tenancy areas (one credit)

Ene 03 External lighting

To reduce energy consumption through the specification of energy efficient light fittings for external areas of the development.

Assessment criteria

External lighting has been designed out? :

Credits awarded : 0

Comments :

The developer will fit external light fittings within the construction zone with: a: Average initial luminous efficacy of not less than 70 luminaire lumens per circuit Watt b: Automatic control to prevent operation during daylight hours c: Presence detection in areas of intermittent pedestrian traffic.

Ene 04 Low carbon design

To encourage the adoption of design measures, which reduce building energy consumption and associated carbon emissions and minimise reliance on active building services systems.

Assessment criteria

Has the first credit within Hea 04 been achieved? : No

Passive design analysis :

Free cooling :

Low and zero carbon technologies :

KPI

Total on-site and/or near-site LZC energy generation :

Expected energy consumption and CO₂-eq emissions reduction resulting

from passive design measures :

Energy consumption :

CO₂-eq emissions :

Expected energy consumption and CO₂-eq emissions reduction resulting

from passive design measures as a percentage :

Energy consumption :

CO₂-eq emissions :

Expected reduction in CO₂-eq emissions resulting from the LZC

technologies :

Expected reduction in CO₂-eq emissions resulting from the LZC

technologies as a percentage :

Credits awarded

: 0

Comments :

SEES Ltd have completed a feasibility study establishing the most appropriate recognised local (on-site or near-site) low and zero carbon (LZC) energy sources for the building or development. The developer will: 1. Specify local LZC technologies for the building or development in line with the feasibility study recommendations. 2. Quantify the reduced regulated carbon dioxide (CO₂-eq) emissions resulting from the feasibility study.

Ene 05 Energy efficient cold storage

To encourage the installation of energy efficient refrigeration systems, in order to reduce operational greenhouse gas emissions resulting from the system's energy use.

Assessment criteria

Refrigeration energy consumption :

Indirect greenhouse gas emissions :

Credits awarded : 0

Comments :

The refrigeration system to the restaurant area will be designed, installed and commission in accordance with the Code of Conduct for carbon reduction in the refrigeration retail sector and BS EN 378-2:20162.

Ene 06 Energy efficient transportation systems

To encourage the specification of energy efficient transport systems within buildings.

Assessment criteria

Energy consumption :

Energy efficient features - Lifts :

Credits awarded : 0

Comments :

The lifts will: 1.a: Analyse the transportation demand and usage patterns for the building to determine the optimum number and size of lifts, escalators or moving walks 1.b: Calculate the energy consumption in accordance with BS EN ISO 25745 Part 21 or Part 32 for one of the following: 1.b.i At least two options for each transportation type (e.g. for lifts, hydraulic, traction or machine room-less (MRL)) OR 1.b.ii At least two options considering different system arrangements and control strategies. 1.c: Consider the use of regenerative drives, subject to the requirements in Regenerative drives 1.d: Specify the transportation system with the lowest energy consumption. Specify the following three energy efficient features for each lift: 3.a: A standby condition for off-peak periods 3.b: The lift car lighting and display lighting provides an average luminous efficacy across all fittings in the car of > 70 luminaire lumens per circuit Watt 3.c: Use of a drive controller capable of variable speed, variable-voltage, and variable-frequency (VVVF) control of the drive motor.

Ene 07 Energy efficient laboratory systems

To encourage laboratory areas that are designed to minimise their operational energy consumption and associated CO2 emission

Assessment criteria - N/A

Comments :

N/A

Ene 08 Energy efficient equipment

To encourage installation of energy efficient equipment to ensure optimum performance and energy savings in operation

Assessment criteria - N/A

Transport (Tra)

Tra 01 Transport assessment and travel plan

To reward awareness of existing local transport and identify improvements to make it more sustainable.

Assessment criteria

Travel plan :

Credits awarded : 0

Comments :

The developer will provide a travel plan and travel assessment for the development.

Tra 02 Sustainable transport measures

To maximise the potential for local public, private and active transport through provision of sustainable transport measures appropriate to the site.

Assessment criteria

Prerequisite :

Location type (based on existing AI) :

Number of points achieved overall :

Credits awarded : 0

Comments :

The travel assessment will confirm the accessibility index, cycle storage, local transport services provided etc.

Water (Wat)

Wat 01 Water consumption

To reduce the consumption of potable water for sanitary use in new buildings through the use of water efficient components and water recycling systems.

Assessment criteria

Please select the calculation procedure used :

Credits awarded : 0

Exemplary performance :

Key Performance Indicators

Credits awarded : 0

Comments :

The developer is targeting a 40% reduction in water consumption over the baseline performance.

Wat 02 Water monitoring

To reduce the consumption of potable water in new buildings through the effective management and monitoring of water consumption.

Assessment criteria

Water meter on the mains water supply to each building :

Sub-metering/monitoring equipment on supply to plant/building areas :

Pulsed output or other open protocol communication output and BMS connection :

The water monitoring strategy used enables the identification of all water consumption for sanitary uses as assessed under Wat 01 (L/person/day) :

Credits awarded : 0

Comments :

A water meter will be provided to the building with the changing rooms and restaurant areas provided with sub meters. Plant will be provided with water monitoring equipment to detect leaks.

Wat 03 Water leak detection

To reduce the consumption of potable water in new buildings through minimising wastage due to water leaks.

Assessment criteria

Leak detection system :

Flow control devices :

Credits awarded : 0

Comments :

The developer will Install a leak detection system capable of detecting a major water leak and the leak detection system is: a: A permanent automated water leak detection system that alerts the building occupants to the leak OR an inbuilt automated diagnostic procedure for detecting leaks b: Activated when the flow of water passing through the water meter or data logger is at a flow rate above a pre-set maximum for a pre-set period of time. This usually involves installing a system which detects higher than normal flow rates at meters or sub-meters. It does not necessarily require a system that directly detects water leakage along part or the whole length of the water supply system c: Able to identify different flow and therefore leakage rates, e.g. continuous, high or low level, over set time periods. Although high and low level leakage rates are not specified, the leak detection equipment installed must have the flexibility to distinguish between different flow rates to enable it to be programmed to suit the building type and owner's or occupier's usage patterns. d: Programmable to suit the owner's or occupier's water consumption criteria e: Where applicable, designed to avoid false alarms caused by normal operation of large water-consuming plant such as chillers.

Wat 04 Water efficient equipment

To reduce water consumption for uses not assessed under Wat 01 by encouraging specification of water efficient equipment.

Assessment criteria

Water efficient consumption :

Credits awarded : 0

Comments :

Reduce of fit water efficient equipment, this includes, but is not limited to the following: -
Recreational hot tubs and hydrotherapy pools - Equipment used for irrigation - Vehicle wash

equipment - Project-specific industrial processes - Water filtration and treatment processes - Building services (e.g. cooling towers and humidification systems) Water could be reduced to the external planting area on the development to achieve this credits.

Materials (Mat)

Mat 01 Life cycle impacts

To reduce the burden on the environment from construction products by recognising and encouraging measures to optimise construction product consumption efficiency and the selection of products with a low environmental impact (including embodied carbon), over the life cycle of the building.

Assessment criteria

Total Mat 01 credits achieved - taken from the Mat 01/02 Results 0

Submission Tool :

Total Exemplary credits achieved - taken from the Mat 01/02 Results 0

Submission Tool :

Credits awarded : 0

Comments :

The developer will complete a life cycle assessment on the development and record the following in the Mat 01/02 Results Submission Tool: The differences between the design options; the design option selected by the client to be progressed beyond Concept Design; the reasons for selecting it and the reasons for not selecting the other design options.

Mat 02 Environmental impacts from construction products

To encourage availability of robust and comparable data on the impacts of construction products through the provision of EPD.

Assessment criteria

Mat 02 credit achieved - Taken from the Mat 01/02 Results Submission 0

Tool. :

Credits awarded : 0

Comments :

As the devolvment proceeds the developer will specify construction products with Environmental Product Declarations (EPD) that achieve a total EPD points score of at least 20.

Mat 03 Responsible sourcing

To facilitate the selection of products that involve lower levels of negative environmental, economic and social impact across their supply chain including extraction, processing and

manufacture.

Assessment criteria

Prerequisite: All timber and timber based products are 'Legally harvested and traded timber' :

Has the enabling sustainable procurement credit been achieved? :

Mat 03 minimum scope level :

Percentage of available for percentage of RSM points achieved :

Credits awarded : 0

Comments :

100% of timber and timber-based products used on the project are 'Legal' and 'Sustainable' as per the UK Government's Timber Procurement Policy (TPP). A sustainable procurement plan must be used by the design team to guide specification towards sustainable construction products.

Mat 05 Designing for durability and resilience

To reduce the need to repair and replace materials resulting from damage to exposed elements of the building and landscape.

Assessment criteria

Protecting vulnerable parts of the building from damage and exposed parts of the building from material degradation :

Credits awarded : 0

Comments :

The development will be designed to Protect vulnerable parts of the building from damage. 1 Protection measures are incorporated into the building's design and construction to reduce damage to the building's fabric or materials in case of accidental or malicious damage occurring. These measures must provide protection against: 1.a: Negative impacts of high user numbers in relevant areas of the building (e.g. corridors, lifts, stairs, doors etc.). 1.b: Damage from any vehicle or trolley movements within 1m of the internal building fabric in storage, delivery, corridor and kitchen areas. 1.c: External building fabric damage by a vehicle. Protection where parking or manoeuvring areas are within 1 metre of the building facade and where delivery areas or routes are within 2 metres of the facade, i.e. specifying bollards or protection rails. 1.d: Potential malicious damage to building materials and finishes, in public and common areas where appropriate. Protecting exposed parts of the building from material degradation: 2 Key exposed building elements have been designed and specified to limit long and short term degradation due to environmental factors. This can be demonstrated through one of the following: 2.a: The element or product achieving an appropriate quality or durability standard or design guide, BS 7543:20151 as the default appropriate standard

Mat 06 Material efficiency

To avoid unnecessary materials use arising from over specification without compromising structural stability, durability or the service life of the building.

Assessment criteria

Material optimisation measures investigated and implemented at all relevant stages :

Credits awarded : 0

Waste (Wst)

Wst 01 Construction waste management

To reduce construction waste by encouraging reuse, recovery and best practice waste management practices to minimise waste going to landfill.

Assessment criteria

Is demolition occurring under the developer's ownership for the purpose of enabling the assessed development? :

Pre-demolition audit :

Compliant Resource Management Plan :

Have waste materials been sorted into separate key waste groups? :

Exemplary level criteria :

KPI

Measure/units for the data being reported :

Credits awarded : 0

Comments :

This issue is split into three parts (four for Simple buildings): 1. Pre-demolition audit (one credit) - Complete a pre-demolition audit of any existing buildings, structures or hard surfaces being considered for demolition. 2. Construction resource efficiency (three credits; one credit for Simple buildings) 3. Simple building - RMP measurements and reporting (two credits) 4. Diversion of resources from landfill (one credit). a minimum 85% non demolition and demolition waste must be diverted from landfill. A minimum 95% of excavation must be diverted from landfill.

Wst 02 Use of recycled and sustainably sourced aggregates

To encourage the use of more sustainably sourced aggregates, encourage reuse where appropriate and avoid waste and pollution arising from disposal of demolition and other forms of waste.

Assessment criteria

Is demolition occurring under the developer's ownership for the purpose of enabling the assessed development? :

Credits awarded : 0

Comments :

Aggregates used on the project will be recycled.

Wst 03 Operational waste

To encourage the recycling of operational waste through the provision of dedicated storage facilities and space.

Assessment criteria

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 :

Credits awarded : 0**Comments :**

The building will be provided with a dedicated space for the segregation of waste. The space is: a: Clearly labelled, to assist with segregation, storage and collection of the recyclable waste streams b: Accessible to building occupants or facilities operators for the deposit of materials and collections by waste management contractors c: Of a capacity appropriate to the building type, size, number of units (if relevant) and predicted volumes of waste that will arise from daily or weekly operational activities and occupancy rates.

Wst 04 Speculative finishes (Offices only)

To minimise the wastage associated with the installation of floor and ceiling finishes in lettable areas in speculative buildings where tenants have not been involved in their selection.

Assessment criteria - N/A**Comments :**

N/A

Wst 05 Adaptation to climate change

To minimise the future need of carrying out works to adapt the building to take account of more extreme weather changes resulting from climate change and changing weather patterns.

Assessment criteria

Resilience of structure, fabric, building services and renewables installation
:

Credits awarded : 0

Comments :

The developer is not currently seeking this credit.

Wst 06 Design for disassembly and adaptability

To avoid unnecessary materials use, cost and disruption arising from the need for future adaptation works as a result of changing functional demands and to maximise the ability to reclaim and reuse materials at final demolition in line with the principles of a circular economy.

Assessment criteria

Design for disassembly and functional adaptability - recommendations :

Credits awarded : 0

Comments :

This issue is split into two parts: - Design for disassembly and functional adaptability - recommendations (one credit) - Disassembly and functional adaptability - implementation (one credit) Only the recommendations are currently targeted.

Land use and ecology (LE)

LE 01 Site selection

To encourage the use of previously occupied or contaminated land and avoid land which has not been previously disturbed.

Assessment criteria

Percentage of proposed development's footprint on previously occupied land: :

Contaminated land :

Credits awarded : 0

Comments :

This issue is split into two parts: Previously occupied land (one credit) Contaminated land (one credit) It is not possible to achieve this credit as the site does not appear to have at least 75% of the proposed development is on previously occupied land.

LE 02 Ecological risks and opportunities

To determine the existing ecological value associated with the site and surrounding areas, and the risks and opportunities for ecological protection and enhancement.

Assessment criteria

Assessment route selection :

Prerequisite - Statutory obligations :

Survey and Evaluation :

Determining ecological outcomes :

Exemplary level - Wider site sustainability :

Credits awarded : 0

Comments :

This issue is split into two parts: - Survey and evaluation - Determining the ecological outcomes for the site It is perceived the client will instruct a Suitably Qualified Ecologist (SQE) carries out a survey and evaluation (see Methodology) for the site early enough to influence site preparation works, layout and, where necessary, strategic planning decisions (typically Preparation and brief stage).

LE 03 Managing impacts on ecology

To avoid, or limit as far as possible, negative ecological impacts associated with the site and surrounding areas resulting from the project.

Assessment criteria

Assessment route :

Prerequisite - Ecological risks and opportunities :

Credits awarded : 0

Comments :

This issue is split into three parts: - Ecological risks and opportunities (prerequisite) - Planning and measures on-site (one credit) - Managing negative impacts (up to two credits) With the SQE appointed credits have been included to manage negative ecological impacts during preparation and construction, planning to avoid negative ecological impacts at planning and throughout construction.

LE 04 Ecological change and enhancement

To enhance ecological value of the area associated with the site in support of local, regional and national priorities.

Assessment criteria

Assessment route :

Prerequisite - Managing negative impacts on ecology :

Credits awarded : 0

Comments :

This issue is split into three parts: - Managing negative impacts on ecology (prerequisite) - Ecological enhancement (up to one credit) - Change and enhancement of ecology (up to three credits) Based on the existing site this credit is not currently included.

LE 05 Long term ecology management and maintenance

To secure ongoing monitoring, management and maintenance of the site and its habitats and

ecological features, to ensure intended outcomes are realised for the long term.

Assessment criteria

Assessment route :

At least one credit achieved under LE 04 for 'Change and Enhancement of Ecology' :

Prerequisite - Statutory obligations, planning and site implementation :

Credits awarded : 0

Comments :

This issue is split into three parts: 1. Statutory obligations, planning and site implementation (prerequisite) 2. Management and maintenance throughout the project 3. Landscape and ecology management plan. The developer will: - Included measures to implement, manage and maintain ecology throughout the project. - Include within the BUG a section on Ecology and Biodiversity for the tenant or building owner. - Include a Landscape and Ecology Management Plan.

Pollution (Pol)

Pol 01 Impact of refrigerants

To reduce the level of greenhouse gas emissions arising from the leakage of refrigerants from building systems.

Assessment criteria

Refrigerant containing systems installed in the assessed building? :

Credits awarded : 0

Comments :

This issue is split into two parts: 1. Impact of refrigerants (two credits) 2. Leak detection (one credit) All systems with electric compressors comply with the requirements of BS EN 378:2016 and the direct effect life cycle CO₂ equivalent emissions (DELCO) of ≤ 100 CO₂-eq/kW for the system chosen.

Pol 02 Local air quality

To contribute to a reduction in local air pollution through the use of low emission combustion appliances in the building.

Assessment criteria

Is the project required to connect to a District Heating system, and it supplies all heating and hot water demands to the building? :

How many credits have been achieved? : 0

Credits awarded : 0

Comments :

All heating and hot water on the development is supplied by non-combustion systems. Only powered by electricity.

Pol 03 Flood risk management and reducing surface water run-off

To avoid, reduce and delay the discharge of rainfall to public sewers and watercourses, thereby minimising the risk and impact of localised flooding on and off-site, watercourse pollution and other environmental damage.

Assessment criteria

Prerequisite: Has an appropriate consultant demonstrated and confirmed the development's compliance with all sought credits? :
Has a site-specific flood risk assessment been conducted? :

Annual probability of flooding :

Has the pre-requisite for the Surface Water Run-Off credits been achieved? :

Flooding of property will not occur in the event of local drainage system failure :

Minimising watercourse pollution :

Credits awarded : 0

Comments :

This issue is split into three parts: - Flood resilience (two credits) - Surface water run-off (two credits) - Minimising watercourse pollution (one credit) The developer will appoint an appropriately qualified consultant and manage the site surface water to not increase pre-development. The developer will also ensure any potential watercourse pollution will be minimised.

Pol 04 Reduction of Night Time Light Pollution

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

Assessment criteria

External lighting has been designed out? :

Credits awarded : 0

Comments :

The external lighting strategy has been designed in compliance with the Institution of Lighting Professionals (ILP) Guidance notes for the reduction of obtrusive light, 2011. All external lighting (except for safety and security lighting) will be automatically switched off between 23:00 and 07:00. If safety or security lighting is provided and will be used between 23:00 and 07:00, this part of the lighting system will comply with the lower levels of lighting recommended during these hours. Any illuminated advertisements will be designed in compliance with ILP PLG05 The Brightness of Illuminated Advertisements.

Pol 05 Noise attenuation

To reduce the likelihood of noise arising from fixed installations on the new development affecting nearby noise-sensitive buildings.

Assessment criteria - N/A

Comments :

A noise impact assessment will be carried out and be compliant with BS 4142:2014. Noise levels must be measured or determined for: 1. Existing background noise levels: a. at the nearest or most exposed noise-sensitive development to the proposed assessed site, including existing plant on a building, where the assessed development is an extension to the building b. Noise rating level from the assessed building. 2 The noise impact assessment must be carried out by a suitably qualified acoustic consultant. 3 The noise level from the assessed building, as measured in the locality of the nearest or most exposed noise-sensitive development, must be at least 5dB lower than the background noise throughout the day and night. 4 If the noise sources from the assessed building are greater than the levels described in criterion 3, measures have been installed to attenuate the noise at its source to a level where it will comply with the criterion.

Innovation (Inn)

Inn 01 Innovation

To support innovation within the construction industry through the recognition of sustainability related benefits which are not rewarded by standard BREEAM issues.

Assessment criteria

Number of 'approved' innovation credits achieved? : 0

Credits awarded : 0

Comments :

Exemplary credits in waste is targeted