BREEAM® UK

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BREEAM UK New Construction Version 6.1

Havant College

Pre-assessment

HSDC Havant College

15 August 2023 Assessment Report

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

bre

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Assessment references

Registration number:	16766	**Date created:**	14/8/2023
Created by:	Harry Hinchliffe		

Site details

Site name:	HSDC Havant College
Address:	
Town:	
County:	
Post code:	
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).

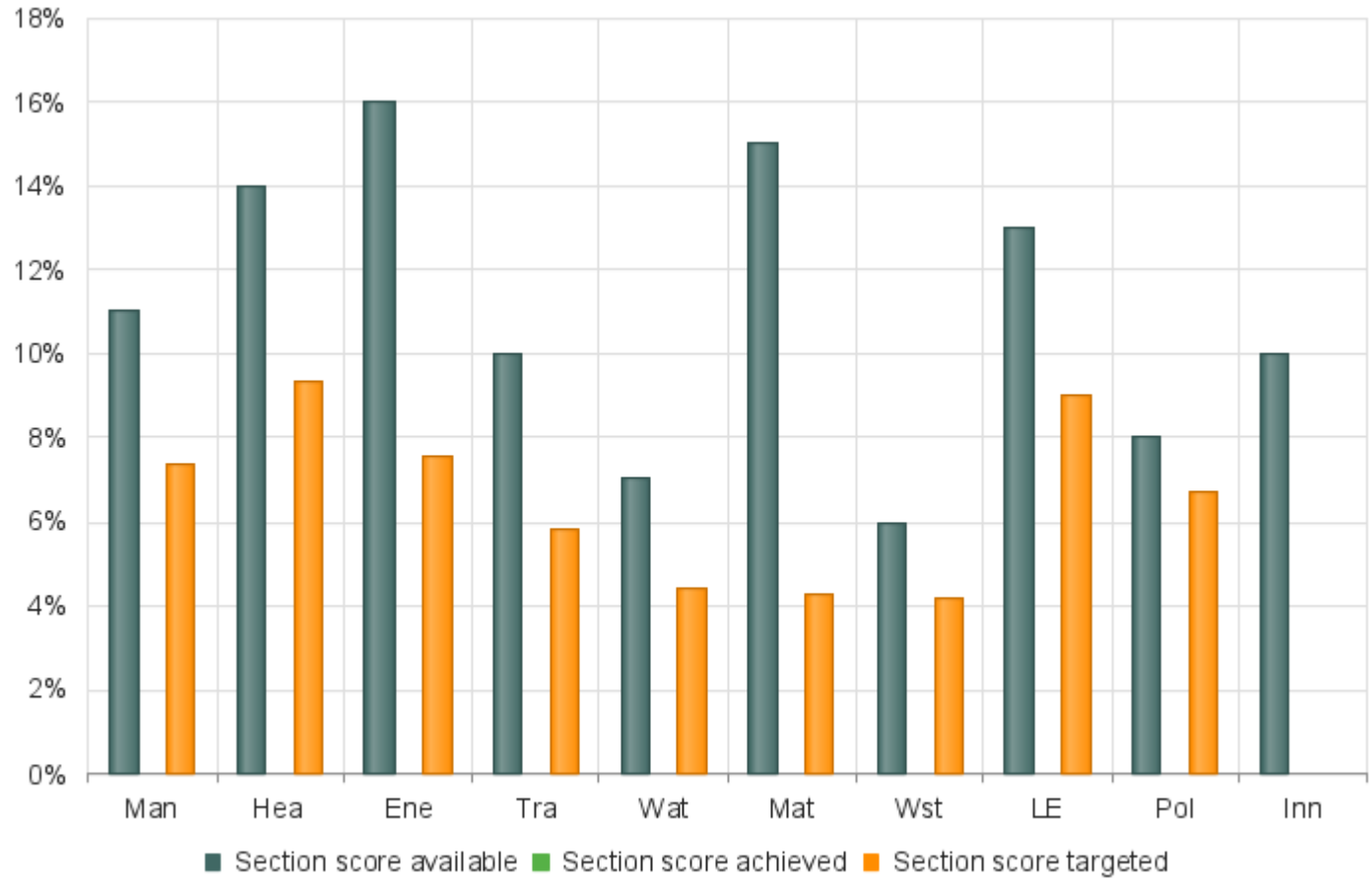
Any other names to appear on the certificate are listed below:

Name	Label

BREEAM Rating

	Credits available	Credits achieved	Credits targeted	% Credits achieved	Weighting	Category score	Target score
Man	21.0	0.0	14.0	0.00%	11.00%	0.00%	7.33%
Hea	18.0	0.0	12.0	0.00%	14.00%	0.00%	9.33%
Ene	19.0	0.0	9.0	0.00%	16.00%	0.00%	7.57%
Tra	12.0	0.0	7.0	0.00%	10.00%	0.00%	5.83%
Wat	8.0	0.0	5.0	0.00%	7.00%	0.00%	4.37%
Mat	14.0	0.0	4.0	0.00%	15.00%	0.00%	4.28%
Wst	10.0	0.0	7.0	0.00%	6.00%	0.00%	4.19%
LE	13.0	0.0	9.0	0.00%	13.00%	0.00%	9.00%
Pol	12.0	0.0	10.0	0.00%	8.00%	0.00%	6.66%
Inn	10.0	0.0	0.0	0.00%	10.00%	0.00%	0.00%
Total	137.0	0.0	77.0	0.00%	-	0.00%	58.60%
Rating	-	-	-	-	-	Unclassified	Very Good

Performance by environmental category



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 / 5 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 / 2

Ene 02 Energy monitoring

0 / 2

Ene 03 External lighting
0 / 1

Ene 04 Low carbon design
0 / 3

Ene 05 Energy efficient cold storage
N/A

Ene 06 Energy efficient transportation systems
N/A

Ene 07 Energy efficient laboratory systems
N/A

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 02 Water monitoring
0 / 1

Wat 03 Water leak detection
0 / 2

Wat 04 Water efficient equipment
N/A

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 and surface water management

0 / 5

Pol 04 Reduction of Night Time Light Pollution

0 / 1

Pol 05 Noise attenuation

0 / 1

Innovation

Inn 01 Innovation

0 / 0 X: 0 / 10

Initial details

Technical manual issue number : 6.1

Project scope : Fully fitted

Building type (main description) : Education

Sub-group : Further education or vocational colleges

Assessment stage : Design (interim)

Building floor area (GIA) : 820 m^2

Building floor area (NIFA) : 820 m^2

Is the building designed to be untreated? : No

Building services - heating system type : Wet system

Building services - cooling system type : Comfort cooling

Does the building have external areas within the boundary of the assessed development? : No

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 there any water demands present other than those assessed in Wat 01? : No

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 evaluation credits targeted in Ene 01 issue? : No

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) :	No
Project delivery planning :	
Prerequisite: Have the client and the contractor formally agreed performance targets? :	Yes
BREEAM Advisory Professional (Concept Design) :	No

Credits awarded : 0

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 :	No
Component level LCC options appraisal :	No
Capital cost reporting :	
Capital cost of the project :	1 Â£k/m^2

Credits awarded : 0

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 :	Yes
Prerequisite: Have the client and the contractor formally agreed performance targets? :	Yes
BREEAM Advisory Professional (site) :	No
Responsible construction management :	2
Monitoring of construction site impacts :	Yes
Utility consumption :	Yes
Transport of construction materials and waste :	Yes
Exemplary level criteria - Responsible construction management :	

Key Performance Indicators: Construction site energy use	
Energy consumption (total) - site processes :	1 kWh
Energy consumption (intensity) - site processes :	1 kWh/project value

Key Performance Indicators: Construction site greenhouse gas emissions	
Process greenhouse gas emissions (total) - site processes :	1 $KgCO_2eq$
Carbon dioxide emissions (intensity) - site processes :	1 $KgCO_2$ eq/project value

Credits awarded : 0

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? :	Yes

Credits awarded : 0

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? :	No
Aftercare support :	
Commissioning - implementation :	
Post occupancy evaluation :	
The client or building occupier commits funds to pay for the POE in advance. :	

Credits awarded : 0

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

Hea 02 Indoor air quality

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

Assessment criteria

Prerequisite: Indoor air quality (IAQ) plan :	
Are you complying with the Ventilation criteria? :	Yes
Specify the type of ventilation :	Mixed mode
Are carbon dioxide (CO_2) sensors installed in all relevant areas? :	Yes
Number of sensors :	15
Net Internal Area of relevant areas covered by sensors :	700
Coverage of sensors :	0.021428571428571
Emissions from construction products :	0
Sampling of TVOC and formaldehyde levels in post-construction :	
Exemplary level criteria: Emissions from construction products :	

Key Performance Indicators

Formaldehyde concentration :	0.0 Î¼g/m^3
Total volatile organic compound (TVOC) concentration :	0.0 Î¼g/m^3

Credits awarded : 0

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

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

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

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

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 :	England
Select how many files need to be uploaded. If more than one BRUKL output has been produced for a single assessment select the number required. :	1
File 1 :	
Upload building '_brukl.inp' file :	
Is space heating provided by a district (network) heating? :	

Energy performance - Building score

Heating and cooling demand energy performance ratio (EPRdem) :	
Primary energy consumption performance ratio (EPRpe) :	
CO_2-eq energy performance ratio (EPRco2-eq) :	
Overall building energy performance ratio (EPRnc) :	
Total BREEAM credits achieved :	0.0
Is the primary energy consumption the same or lower than that of the notional building? :	
Is the primary energy consumption at least 10% lower than that of or higher than that of the notional building? :	

Prediction of operational energy consumption

Has a passive design analysis been carried out? :	No

Post-occupancy evaluation (exemplary credits)

Has the maximum credit score been achieved in Ene 02 Energy monitoring? :	No
Has the client or building occupier committed funds to pay for the post-occupancy evaluation? :	
Has the energy model been submitted to BRE or retained by the building owner/named third party? :	

Credits awarded : 0

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

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

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 CO_2-eq emissions reduction resulting from passive design measures :
Energy consumption :

CO_2-eq emissions :

Expected energy consumption and CO_2-eq emissions reduction resulting from passive design measures as a percentage :
Energy consumption :

CO_2-eq emissions :

Expected reduction in CO_2-eq emissions resulting from the LZC technologies as a percentage :
Expected reduction in CO_2-eq emissions resulting from the LZC technologies :

Credits awarded : 0

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 - N/A

Ene 06 Energy efficient transportation systems

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

Assessment criteria - N/A

Ene 07 Energy efficient laboratory systems

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

Assessment criteria - 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

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

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

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

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

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 - N/A

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

Credits awarded : 0

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 Tool. :	0

Credits awarded : 0

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

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

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 practicesto 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

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

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

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

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

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

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

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

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

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

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 Ecologyâ :
Prerequisite - Statutory obligations, planning and site implementation :

Credits awarded : 0

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

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

Pol 03 Flood and surface water management

To avoid, reduce and delay the discharge of rainfall to public sewers and watercourses, thereby minimising the risk and impact of localised flooding on-site 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 criteria? :
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

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

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

Noise-sensitive areas/buildings within 800m radius of the development :

Credits awarded : 0

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