Preliminary BREEAM Assessment

Belsize Studio - 81 Belsize Park Gardens, London

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Document information

Document prepared for
Dukes Education

Date of issue
27/02/2023

Issue no.
1

Our reference
10271_Belsize Studio_BREEAM 2014 RFO Prelim report-2302-27aaQAar

Document prepared by
Andreea Andrei

Quality assured by
Alex Reed

Disclaimer
This report is made on behalf of Eight Versa Ltd. 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).

Contents:

Preliminary BREEAM Assessment

Belsize Studio - 81 Belsize Park Gardens, London

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Executive summary

Introduction

Eight Versa has been appointed, as registered BREEAM assessors, to carry out an assessment of the proposed refurbishment at Belsize Studio, Hampstead, London. This project will be assessed under the BREEAM 2014 Refurbishment and Fit Out (Non-Domestic Buildings) methodology.

The site is located at 81 Belsize Park Gardens, London. The Nearest Post Code is NW3 4NJ.

This summary is a pre-assessment of the development and details the anticipated score following the information provided by the design team at a meeting held in February 2023 with a BREEAM Accredited Professional and subsequent discussions.

The project was registered with BRE with reference number BREEAM-0097-9351.

Project Summary

The BREEAM requirements for the refurbishment and fit out of Belsize Studio is as follows:

- 'Excellent' BREEAM rating

Score Summary

The site reviewed currently targets a score of 71.69%, which equates to an 'Excellent' rating.

Eight Versa recommends a safety margin of at least 3-5% to safeguard any rating at formal assessment. Eight Versa and the Client are exploring potential options for securing additional credits to establish a buffer of 3-5%.

Preliminary BREEAM Assessment

Belsize Studio - 81 Belsize Park Gardens, London

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Introduction

The BREEAM Standard

BREEAM (Building Research Establishment's Environmental Assessment Method) is the world's first sustainability rating scheme for the built environment. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance.

To date BREEAM has been used to certify over 560,000 building assessments across the building life cycle and is being applied in over 80 countries.

BREEAM is developed, operated and maintained by BRE Global Ltd and the operation and direction of the method is overseen by an independent Sustainability Board, representing a wide cross-section of construction industry stakeholders. Further information about BREEAM, including copies of the BREEAM standards, can be found at www.breeam.org.

Aims of BREEAM

- To mitigate the impacts of buildings on the environment
- To enable buildings to be recognised according to their environmental benefits.
- To provide a credible, environmental label for buildings.
- To stimulate demand for sustainable buildings.

BREEAM Refurbishment & Fit Out

BREEAM Refurbishment & Fit Out is a performance-based assessment method and certification scheme for existing buildings. The primary aim of BREEAM UK Refurbishment and Fit Out is to promote the delivery of sustainable refurbishment and fit-out, in order to mitigate the life cycle impacts of existing buildings on the environment in a robust and cost-effective manner. This is achieved through integration and use of the scheme by clients and their project teams at key stages in the design and refurbishment/fit-out works process.

Projects are assessed at design and post-construction stages using a system of environmental issues grouped within the following sections:

- Management
- Health and Wellbeing
- Energy
- Transport
- Water
- Materials
- Waste
- Land Use & Ecology
- Pollution
- Innovation

Preliminary BREEAM Assessment

Belsize Studio - 81 Belsize Park Gardens, London

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Process of the Assessment

BREEAM Refurbishment and Fit Out 2014 is a performance-based assessment method and certification scheme for existing building refurbishment and fit-out. The primary aim of BREEAM Refurbishment and Fit Out 2014 is to promote the delivery of sustainable refurbishment and fit-out, in order to mitigate the life cycle impacts of existing buildings on the environment in a robust and cost effective manner.

The scheme intends to measure, evaluate, and reflect the performance of refurbishment or fit-out projects against best practice in an independent and robust manner.

Assessments take place over two phases:

- Design Stage (DS): This is based on the final design for the development and the intentions of the design team. Submission before the completion of RIBA Stage 4.
- Post Construction Review (PCR): This is based on the built development and requires the BREEAM assessor to carry out a site visit. Submission at RIBA Stage 6.

An interim certificate will be provided following submission of the design stage assessment, with final certification being awarded following the completion of the post construction review.

Refurbishment and Fit Out

BREEAM Refurbishment and Fit-Out provides modular framework for projects. The Scheme is split into the following parts, which are selected according to the scope of works. Each part defines a set of individual measures and associated criteria against which a project is assessed.

Part 1: Fabric and Structure.
Part 2: Core Services.
Part 3: Local Services.
Part 4: Interior Design.

This approach provides the scheme's users with a flexible means of measuring the environmental performance of their building and comparing it with other buildings across the property market, backed with the assurance that independent third-party certification of the assessment process provides.

A project can choose which parts they wish to gain certification against and the certificate will clearly highlight the parts that the projects have been assessed under.

Preliminary BREEAM Assessment

Belsize Studio - 81 Belsize Park Gardens, London

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Ratings

The assessment process results in a rating on a scale of PASS, GOOD, VERY GOOD, EXCELLENT and OUTSTANDING. The rating bands for each are as follows:

Rating	Minimum Score Required	Performance equivalent to (% of UK new non-domestic buildings)
Pass (P)	30%	<75% (standard good practice)
Good (G)	45%	<50% (intermediate good practice)
Very Good (VG)	55%	<25% (advanced good practice)
Excellent (E)	70%	<10% (best practice)
Outstanding (O)	85%	<1% (innovator)

Mandatory Credits

Some credits, or criteria within credits, are mandatory to achieve certain ratings:

BREEAM Issue	P	G	VG	E	O
Man 03: Responsible construction practices	-	-	-	1 credit	2 credits
Man 04: Commissioning & handover	-	-	-	Criterion 9[1]	Criterion 9
Man 05: Aftercare	-	-	-	1 credit[2]	1 credit
Ene 01: Reduction of CO2 emissions	-	-	-	6 credits	10 credits
Ene 02: Energy monitoring	-	-	1 credit[3]	1 credit	1 credit
Wat 01: Water consumption	-	1 credit[4]	1 credit	1 credit	2 credits
Wat 02: Water monitoring	-	Criterion 1[5]	Criterion 1	Criterion 1	Criterion 1
Mat 03: Responsible sourcing	Criterion 1[6]	Criterion 1	Criterion 1	Criterion 1	Criterion 1
Wst 01: Construction waste	-	-	-	-	1 credit
Wst 03: Operational waste	-	-	-	1 credit	1 credit

[1] A Building User Guide must be developed prior to handover, for distribution to the building occupiers and premises managers.
[2] Seasonal commissioning (only applicable to assessment parts 2 and 3)
[3] First sub-metering credit (parts 2, 3 and 4)
[4] A 12.5% improvement on the BREEAM baseline
[5] A water meter must be specified on the mains water supply to each building (part 2)
[6] All timber and timber-based products used on the project must be legally harvested and traded.
Full details for each credit follow later in this document.

Preliminary BREEAM Assessment

Belsize Studio - 81 Belsize Park Gardens, London

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Score Breakdown

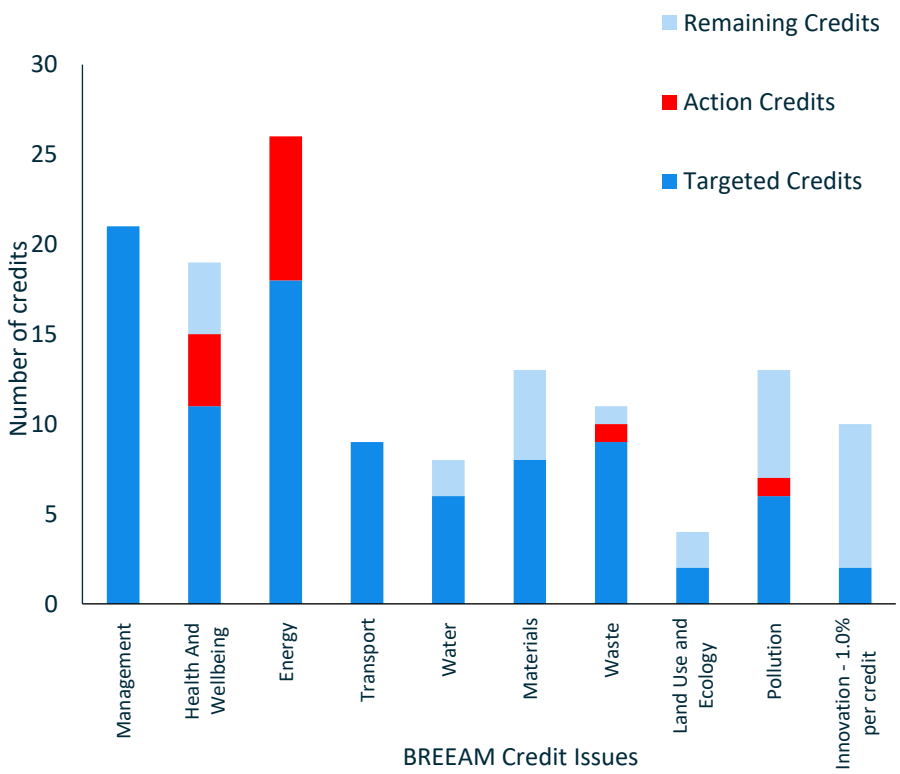
Rating Summary (Parts 1-4)

The following summary represents the scheme's preliminary score based on the assumptions in the following pages. This includes Parts 1-4.

Credit Categories	% Targeted	Weighting	Score
Management	100.00%	13.54%	13.54%
Health and Wellbeing	57.89%	14.62%	11.54%
Energy	69.23%	16.89%	16.89%
Transport	100.00%	6.77%	6.77%
Water	75.00%	6.02%	4.51%
Materials	61.54%	14.10%	8.67%
Waste	81.82%	7.76%	7.05%
Land Use and Ecology	50.00%	9.03%	4.51%
Pollution	46.15%	11.28%	6.07%
Innovation	20.00%	10.00%	2.00%
		Total Score	71.69%
		Rating	Excellent

Graphics Breakdown

The graph below shows the credits currently targeted (dark blue), action credits (red) and remaining credits in each BREEAM section (light blue).



Preliminary BREEAM Assessment

Belsize Studio - 81 Belsize Park Gardens, London

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Parts Assessed

Parts Summary
Part 1: Fabric and Structure ✓
Part 2: Core Services ✓
Part 3: Local Services ✓
Part 4: Interior Design ✓

Part 1: Fabric and Structure (included in assessment)
A Part 1 assessment may be appropriate where there are one or more of the following alterations to the building fabric, and where the area to be renovated is greater than 50% of the surface of the individual element (or 25% of the total building envelope):

✗ Building facade
✓ Roof
✓ Windows

Part 2: Core Services (included in assessment)
A Part 2 assessment may be appropriate where at least two of the following are being installed or upgraded to a level that requires compliance with the Building Regulations Compliance Guide:

✓ Central air handling unit
✓ Heating boiler
✓ More than 50% of heat distribution chiller plant
✓ More than 50% of chiller distribution
✓ Water services (sanitary fittings in core)
✓ Building management system
✗ Community heating system (e.g. CCHP)
✓ Low and zero carbon technologies.

Part 3: Local Services (included in assessment)
A Part 3 assessment may be appropriate where at least two of the following fixed local building services are being installed or upgraded (e.g. a replacement or new installation of local heating/cooling units):

✓ Replacement of more than 50% of light fittings, system and controls
✓ Upgrade of zone controls
✗ Local ventilation
✓ Local heating units (including sources not connected to core services)
✗ Local cooling units (including sources not connected to core services)
✓ Point of use water heaters.

Part 4: Interior Design (included in assessment)
A Part 4 assessment may be appropriate where the refurbishment or fit-out works involve changes to the layout and/or redecoration of the refurbishment or fit-out area. Including two or more of the following:

✓ Wall coverings
✓ Floor coverings
✗ Ceiling covering or systems
✓ Partitions
✗ Raised floor system
✓ Furniture and fittings
AND at least one of the following:

✓ Sanitary fittings
✗ Equipment (e.g. office equipment, display lighting, freezers)
✓ Local electrical installations (e.g. sub-metering)

Preliminary BREEAM Assessment

Belsize Studio - 81 Belsize Park Gardens, London

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Project Specific Details

Technical manual number:	SD216 Issue 2.0
Project type:	Major, whole building refurbishment
Building type:	Education-Secondary School
Historic building?	No
Commercial and/or industrial scale refrigeration or storage specified?	No
New building user transportation systems?	Yes
Laboratories present?	No
Systems that significantly contribute towards unregulated energy demands?	No
Sanitary fittings within scope?	Yes
Office areas included?	Yes
Unregulated water demand?	No
Landscaping included?	Yes
Local cooling included?	No
Local heating or hot water included?	Yes
Externally mounted plant specified?	Yes
Speculative refurbishment?	No
External lighting included?	Yes

Simple building?	No
Is new insulation specified?	Yes
Are high grade aggregates to be used in the scope of the refurbishment scheme?	Yes

Preliminary BREEAM Assessment

Belsize Studio - 81 Belsize Park Gardens, London

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Management

Man 01: Project Brief and Design — 4 of 4

Stakeholder Consultation - Project Delivery (one credit)
Prior to completion of RIBA Stage 2 (Concept Design) the design team will meet to identify and define their roles and responsibilities, as well as contributions for each key phase of the project. During this stage the team will produce a clear sustainability brief outlining the sustainability objectives for the project, the timescales and budget, specific client requirements, potential constraints, and any professional appointments that may be required.
One of one credit targeted.

Stakeholder Consultation - Third Party (one credit)
Prior to completion of RIBA Stage 2 (Concept Design), all relevant third party stakeholders (e.g. local residents, businesses, existing partnerships and networks) will be consulted by the design team and it will be demonstrated that the outcomes of the consultation exercise have influenced the initial project brief and concept design.
One of one credit targeted.

Sustainability Champion – Initial Design (one credit)
The project team has confirmed that a BREEAM Accredited Professional (AP) has been appointed (at RIBA Stage 1) to facilitate the setting and achievement of BREEAM performance targets for the project. The defined performance targets have been formally agreed by the client and the project team.
One of one credit targeted.

Sustainability Champion - Monitoring Progress (one credit)
The project team has confirmed that a BREEAM Accredited Professional (AP) has been appointed to monitor and report progress against the established BREEAM targets by attending key project team meetings during all stages of the design.
One of one credit targeted.

In total, four out of four credits are currently targeted for this issue.

Man 02: Life Cycle Cost and Service Life Planning — 4 of 4

Elemental Life Cycle Costing (two credits)
An elemental life cycle cost analysis is expected to be carried out by RIBA stage 2 in accordance with PD 156865-2008.
Two of two credits targeted.

Component Level Life Cycle Options Appraisal (one credit)
A component level LCC options appraisal is expected to be carried out by RIBA stage 4 to minimise life cycle costs and maximise value.
One of one credit targeted.

Capital Cost Reporting (one credit)
The design team has committed to report the capital cost for the building in pounds per square metre (£k/m2), via the BREEAM Assessment Scoring and Reporting tool in line with BREEAM requirements.
One of one credit targeted.

In total, four out of four credits are currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Man 03: Responsible Construction Practices 6 of 6

Mandatory Requirements:
One credit must be awarded under Considerate Construction in order to achieve an Excellent rating.

Timber (prerequisite)
All timber is to be legally harvested and traded.

This is a prerequisite for this issue; no credits can be awarded unless this requirement is met.

Environmental Management (one credit)
The design team will appoint a principal contractor who operates an Environmental Management System, certified under ISO14001/ EMAS or an equivalent standard, covering their main operations.
One of one credit targeted.

Sustainability Champion (construction) (one credit)
A sustainability champion will be appointed to monitor the project on site to ensure on-going compliance with the relevant sustainability performance criteria and BREEAM targets during the construction and handover stages.
One of one credit targeted.

Considerate Construction (two credits + Exemplary credit)
The contractor will be required to register the scheme under the Considerate Constructors Scheme (CCS) and will be committed to achieve at least 39 points, with a minimum of 13 points in each section.
Two of two credits and one exemplary credit targeted.

Monitoring of Construction-Site Impacts (two credits)
The design team has confirmed that an individual is responsible for monitoring, recording and reporting the following:

- Monitor and record data on energy consumption from the use of construction plant, equipment and site accommodation;
- Monitor and record data on water consumption from the use of construction plant, equipment and site accommodation;
- Monitor and record transport data resulting from delivery of the majority of construction materials to site and construction waste from site.

Two of two credits targeted.

In total, six of six credits and one exemplary credit are currently targeted for this issue.

Man 04: Commissioning and Handover 4 of 4

Mandatory Requirements:
A Building User Guide must be produced in order to achieve an Excellent rating (even if this issue is not targeted).

Commissioning (two credits)
A member of the design team will be appointed to monitor commissioning in line with best practice (CIBSE, BSRIA and Current Building Regulations), with a specialist commissioning agent appointed for any complex systems.
Two of two credits targeted.

Testing and Inspecting Building Fabric (one credit)
The design team has confirmed that a thermographic survey and air tightness testing will be carried out for the project. This will be achieved by a Level 2 thermographer carrying out a thermographic survey at post-construction stage. The survey will include all elements of the building fabric that enclose an internal heated and/or conditioned zone of the building. In order to secure this credit a commitment must be made to rectify any defects identified by this survey.
One of one credit targeted.

Handover (one credit)
The production of a technical manual and a non-technical building user guide in line with the BREEAM requirements is planned. This must contain the information listed within Appendix A.
In addition, a training schedule will be prepared for building occupiers / facilities managers to aid handover.
One of one credit targeted.

In total, four of four credits are currently for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Man 05: Aftercare **3 of 3**

Mandatory Requirements:
Parts 2 & 3 – Seasonal Commissioning must be carried out to achieve an Excellent rating.

Aftercare Support (one credit)
There will be operational infrastructure and resources in place to provide aftercare support to the building occupier and to coordinate the collection and monitoring of energy and water consumption data for a minimum of 12 months once the building is occupied.
One of one credit targeted.

Seasonal Commissioning (one credit)
Seasonal commissioning activities will be completed over a minimum 12-month period once the building becomes substantially occupied.
One of one credit targeted.

Post Occupancy Evaluation (one credit)
The client or building occupier will make a commitment to carry out a post occupancy evaluation (POE) exercise one year after initial building occupation, providing funds in advance. The POE will be carried out by a third-party consultant.
One of one credit targeted.

In total, three of three credits are currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Health and Wellbeing

Hea 01: Visual Comfort **2 of 7**

Control of Glare from Sunlight (one credit)
The design team has confirmed that occupant controllable blinds will be provided in all relevant occupied areas to reduce the potential for disabling glare. The glare control strategy will be designed to maximise daylight levels under all conditions, while avoiding glare, in order to avoid increasing lighting energy consumption.
One of one credit targeted.

Daylighting (three credits)
The design team has confirmed that daylight modelling is not currently included within the design scope.
Zero of three credits targeted.

View Out (two credits)
The design team has confirmed that the requirements for View Out are unlikely to be achieved.
Zero of two credit targeted.

Internal and External Lighting Levels, Zoning and Controls (one credit)
The design team has confirmed the following will be met for the scheme:

- Where specified, all fluorescent and compact fluorescent lamps will be fitted with high frequency ballasts;
- Internal lighting will provide illuminance levels in accordance with the SLL Code of Lighting 2012 (and any other relevant industry standard);
- For areas where computer screens are regularly used the lighting design will comply with the appropriate sections of CIBSE Lighting Guide 7;
- All external lighting will provide illuminance levels that enable users to perform outdoor visual tasks efficiently and accurately;
- Internal lighting will be appropriately zoned to allow for occupant control within relevant building areas in accordance with the BREEAM criteria;
- External lighting will be specified in accordance with BS 5489-1:2013 Lighting of roads and public amenity areas and BS EN 12464-2:2014 Light and lighting – Lighting of workplaces – Part 2: Outdoor workplaces).

Specific requirements for Education buildings:

- Areas used for teaching, seminar or lecture purposes have lighting controls provided in accordance with CIBSE Lighting Guide 5.
- Manual lighting controls are easily accessible for the teacher while teaching and on entering/leaving the teaching space.

One of one credit targeted.

In total, two of seven credits are currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Hea 02: Indoor Air Quality 2 of 5

Indoor Air Quality Plan (one credit)
The design team has confirmed that an Indoor Air Quality (IAQ) plan will be provided in line with BREEAM requirements.
One of one credit targeted.

Ventilation (one credit)
The design team will review the ventilation strategy for compliance against the BREEAM requirements. The credit is not currently targeted.
Zero of one credit targeted.

Volatile Organic Compounds - VOCs (one credit)
The design team has confirmed that at least 5 of the product types listed in the BREEAM RFO 2014 manual table 20 will meet the emission limits, testing standards and any additional requirements in line with the BREEAM guidance. Please see Appendix C for full compliance details.
One of one credit targeted.

Post-Construction Indoor Air Quality Measurement (one credit)
The design team has confirmed that the credit for this part of the issue will not be targeted at design stage - testing to measure VOC and formaldehyde concentration levels at post-construction stage is not expected to be undertaken.
Zero of one credit targeted.

Adaptability – Potential for Natural Ventilation (one credit)
The design team has confirmed that the credit for this part of the issue is not likely to be targeted at design stage
Zero of one credit targeted.

In total, two of five credits are currently targeted for this issue.

Hea 04: Thermal Comfort 3 of 3

Thermal Modelling (one credit)
Thermal modelling, in line with CIBSE AM11, will be undertaken for the development using full dynamic thermal analysis software. Summer and winter operative temperature ranges in occupied spaces will be in accordance with the criteria set out in CIBSE Guide A Environmental design.
One of one credit targeted.

Design for Future Thermal Comfort (one credit)
The design team has confirmed that the thermal modelling will include an allowance for a projected climate change environment.
One of one credit targeted.

Thermal Zoning and Controls (one credit)
The thermal modelling analysis will be undertaken and will inform the thermal comfort strategy. The heating and cooling will be zoned and controlled appropriately for the building type and its users' requirements.
One of one credit targeted.

In total, three of three credits are currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Hea 05: Acoustic Performance 3 of 3

A suitably qualified acoustician will define an appropriate set of performance requirements for the building for:

- Sound insulation
- Indoor ambient noise level
- Reverberation

The acoustic performance will be confirmed via a programme of pre-completion testing, carried out by a compliant test body.

Please see Appendix D for full compliance details.

In total, three of three credits are currently targeted for this issue.

Hea 06: Security 1 of 1

Security of Site and Building (one credit)
The design team has confirmed that a suitably qualified security consultant from the local police will be consulted during the planning process and recommendations will be incorporated into the design.

In total, one of one credit is currently targeted for this issue.

Note: Definition of Suitably Qualified Security Specialist (SQSS)
An individual achieving any of the following can be considered to be 'suitably qualified' for the purposes of compliance with BREEAM:

1. Crime Prevention Design Advisors (CPDA) or Architectural Liaison Officers (ALO), designing Out Crime Officer (DOCO), Counter Terrorism Security Advisor (CTSA); or
2. A specialist registered with a BREEAM-recognised third party accreditation scheme for security specialists.
3. A practising security consultant that meets the following requirements:
    a. Minimum of three years relevant experience within the last five years. This experience must clearly demonstrate a practical understanding of factors affecting security in relation to construction and the built environment, relevant to the type and scale of the project being undertaken.
    b. Hold a suitable qualification relevant to security.
    c. Maintains (full) membership to a relevant professional body or accreditation scheme that meets the following:
        i. Has a professional code of conduct, to which members must adhere; and
        ii. Ongoing membership is subject to peer review.

When appointing the suitably qualified security specialist, consideration should be given to the appropriateness of the individual to carry out the security needs assessment, based on the size, scope and security needs of the development.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Energy

Ene 01: Reduction of CO_2 emissions — 10 of 15

Mandatory Requirement:
At least six credits must be achieved to secure an Excellent rating.

Energy modelling and BRUKL reports will be produced for the existing building and proposed design at design stage.

Please note that the BREEAM guidance requests "A copy of the Building Regulations Output Document from the Part L Approved Documents check (BRUKL Output Document)" and an "As Built" copy of the document for the PCR stage.

In total, ten of fifteen credits are currently targeted for this issue.

Ene 02: Energy Monitoring — 2 of 2

Mandatory Requirement:
For parts 2, 3 & 4 one credit (first sub-metering credit) must be achieved to secure a Very Good or Excellent rating.

Sub-Metering of End-Use Categories (one credit)
Pulsed sub-meters will be provided to ensure the following are met:

Energy metering systems are installed that enable at least 90% of the estimated annual energy consumption of each fuel to be assigned to the various end-use categories of energy consuming systems.

The energy consuming systems in buildings with a total useful floor area greater than 1,000m^2 are metered using an appropriate energy monitoring and management system.

The end energy consuming uses are identifiable to the building users, for example through labelling or data outputs.
One of one credit targeted.

Sub-Metering of High Energy Load and Tenancy Areas (one credit)
In addition, an accessible energy monitoring and management system or with pulsed or other open protocol communication outputs are to be provided. These will cover a significant majority of the energy supply to the relevant function areas or departments within the building.
The design team has confirmed that there will be sub-metering per floor plate.
One of one credit targeted.

In total, two of two credits are currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Ene 03: External Lighting 1 of 1

The design team has confirmed that any external lighting will have an average initial luminous efficacy of greater than 60 luminaire lumens per circuit Watt. All external light fittings will be automatically controlled to prevent operation during daylight hours and presence detection in areas of intermittent pedestrian traffic.

In total, one of one credit is currently targeted for this issue.

Ene 04: Low Carbon Design 2 of 3

Passive Design Analysis (one credit)
The design team will carry out an analysis of the proposed building design/development to influence decisions made during Concept Design stage and identify opportunities for the implementation of passive design solutions that reduce demands for energy consuming building services.

The building will use passive design measures to reduce the total heating, cooling, mechanical ventilation and lighting loads and energy consumption in line with the findings of the passive design analysis, and the analysis will demonstrate a meaningful percentage reduction in the total energy demand.
One of one credit targeted.

Free Cooling (one credit)
The design team has confirmed that the credit for free cooling will not be targeted at design stage.
Zero of one credit targeted.

Low and Zero Carbon Technologies (one credit)
A feasibility study will be carried out by an independent energy specialist during Concept Design to establish the most appropriate local low or zero carbon energy source for the development, and an LZC technology will be specified in line with the recommendations of this report (resulting in a reduction in CO2 emissions).
One of one credit targeted.

In total, two of three credits are currently targeted for this issue.

Ene 06: Energy Efficient Transportation Systems 3 of 3

Energy Consumption (one credit)
The design team has confirmed that a transportation demand and usage pattern analysis will be carried out for the building to determine the optimum number and size of lifts, escalators or moving walks in accordance with BS EN ISO 25745. The energy consumption will be calculated for at least two types of system and the one with the lowest energy consumption specified.
One of one credit targeted.

Energy Efficient Features (two credits)
The design team has confirmed they will specify the following energy efficient features for each lift:

- A standby condition for off-peak periods.
- The lift car lighting and display lighting provides an average luminous efficacy across all fittings in the car of >55 luminaire lumens per circuit Watt.
- Use of a drive controller capable of variable speed, variable-voltage, and variable-frequency (VVF) control of the drive motor.

Regenerative drives will be considered where these would produce an energy saving greater than the additional standby energy used to support the drives.
Two of two credits targeted.

In total, three of three credits are currently targeted for this issue.

Ene 08: Energy Efficient Equipment 0 of 2

The design team has confirmed that the credit for Energy Efficient Equipment will not be targeted at design stage.

In total, zero of two credits are currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Transport

Tra 01: Public Transport Accessibility **3 of 3**

The development is located in Hampstead, London, and according to PTAL information has an Accessibility Index of 12.04.

In total, three of three credits are currently targeted for this issue.

Tra 02: Proximity to Amenities **1 of 1**

The development is located in Hampstead, London, in proximity to a number of local amenities.

In total, one of one credit is currently targeted for this issue.

Tra 03: Cyclist Facilities **2 of 2**

Cycle Storage (1 credit)
The design team has confirmed that the development will provide cycle racks of one space per 10 staff & pupils/students total and compliant cyclist facilities.

The easily accessible cycle storage will be secured in racks and covered overhead, any lighting will comply with BREEAM criteria.
One of one credit targeted.

Cyclist Facilities (1 credit)
At least two cyclist facilities, showers, changing space, lockers or a drying space, will be incorporated within the design. The following will be met regarding the specified facilities:

- One shower will be provided for every 10 cycle spaces. Both male and female users will be catered for i.e. either separate showers within shared gender-specific facilities (required provision split 50-50) or single shower cubicles and changing space for mixed use.
- Changing areas will be provided and include adequate space and facilities to hang/store clothing and equipment whilst changing/showering.
- The number of lockers is at least equal to the number of cycle spaces provided and are either in or adjacent to compliant changing rooms. The lockers are sized appropriately for the storage of a cyclist's equipment.
- A drying space is specifically designed and designated with adequate heating/ventilation for the drying of wet clothes.

One of one credit targeted.

In total, two of two credits are currently targeted for this issue.

Tra 04: Maximum car parking capacity **2 of 2**

The design team has confirmed that building has no parking provision. The credit will be achieved by default.

In total, two of two credits are currently targeted for this issue.

Tra 05: Travel Plan **1 of 1**

A site-specific travel plan will be developed as part of the feasibility and design stages, which will consider all types of travel relevant to the building type and users.

In total, one of one credit is currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Water

Wat 01: Water Consumption — 3 of 5

Mandatory Requirement:
One credit is required in order to achieve an Excellent rating.

The design team has confirmed that they will aim for a 40% improvement in water consumption (litres/person/day) compared to BREEAM's notional baseline performance.

To achieve this, it is anticipated that specified sanitaryware will meet the following thresholds:

- WCs will have 4 litres effective flush volume.
- Wash hand basins will have a flow rate of no greater than 4.5 litres/min
- Showers will have a flow rate of no greater than 6 litres/min.
- Kitchen taps will have a flow rate of no greater than 5 litres/min
- Domestic dishwashers will have a capacity of no greater than 12 litres/cycle.
- Commercial dishwashers will have a capacity of no greater than 5 litres/rack.
- Domestic washing machine will have a capacity of no greater than 40 litres/use.
- Commercial washing machine will have a capacity of no greater than 7.5 litres/kg.

Any greywater systems must be specified and installed in compliance with BS 8525-1:2010 and any rainwater systems must be specified and installed in compliance with BS EN 16941-1:2018.

Three of five credits are currently targeted for this issue.

Wat 02: Water Monitoring — 1 of 1

Mandatory Requirement:
A water meter must be specified (even if this issue is not targeted) in order to achieve an Excellent rating.

The design team has confirmed that a pulsed water meter will be installed on the mains water supply to each building.

Water-consuming plant or building areas consuming 10% or more of the building's total water demand will be fitted with easily accessible sub-meters or have water monitoring equipment integral to the plant or area.
In total, one of one credit is currently targeted for this issue.

Wat 03: Water Leak Detection and Prevention — 2 of 2

Leak Detection (one credit)
The design team has confirmed a major leak detection system on the mains water supply within the building and between the building and the utilities water meter will be provided. The system will comply with the following:

- Permanent and automated
- Activated when the flow of water is at a flow rate above a pre-set maximum for a pre-set period of time
- Able to identify different flow and leakage rates
- Programmable to suit the owner/occupiers' water consumption criteria.
- Where applicable, designed to avoid false alarms caused by normal operation of large water-consuming plant such as chillers.

One of one credit targeted.

Sanitary Shut-Off System (one credit)
Flow control devices that regulate the supply of water to each WC area/facility according to demand will be proposed (and therefore minimise water leaks and wastage from sanitary fittings).
One of one credit targeted.

In total, two of two credits are currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Materials

Mat 01: Environmental Impact of Materials 2 of 6

The design team has confirmed that a number of materials will have robust environmental performance information or will be reused in-situ. These credits will be reviewed once the materials specification has been confirmed.

In total, two of six credits are currently targeted for this issue.

Mat 03: Responsible Sourcing of Materials 3 of 4

Mandatory Requirement:
The pre-requisite for this issue must be complied with (even if this issue is not targeted) in order to achieve all ratings.

Pre-Requisite
The design team has confirmed that all timber used on the project will be legally harvested and traded timber.

Sustainable Procurement Plan (one credit)
The main contractor will be required to implement a sustainable procurement plan to guide specification towards sustainable construction products.
One of one credit targeted.

Measuring Responsible Sourcing (3 credits)
The design team has confirmed that, where possible, key building elements will be responsibly sourced (e.g. all timber FSC certified, and any bricks, pavers, concrete, glass, metals, plaster etc. covered by BRE Global, BES 60001 certification, or EMS certified for both the key process and supply chain extraction process).
Two of three credits targeted.

In total, three of four credits are targeted for this issue.

Mat 04: Insulation 1 of 1

The design team has confirmed that any new insulation specified and installed for the external walls, ground floor, roof and building services will be A or A+ rated under the Green Guide.

In total, one of one credit is currently targeted for this issue.

Mat 05: Designing for Durability and Resilience 1 of 1

Protecting Vulnerable Parts of the Building from Damage
Materials and features will be specified to protect vulnerable parts of both the internal and external areas of the building.

Protecting Exposed Parts of the Building from Material Degradation
The relevant building elements will incorporate appropriate design and specification measures to limit material degradation due to environmental factors. The elements will either achieve an appropriate quality or durability standard or a resilience assessment will be carried out on the element.

In total, one of one credit is currently targeted for this issue.

Mat 06: Materials Efficiency 1 of 1

The design team has confirmed that opportunities will be identified, and appropriate measures investigated and implemented to optimise the use of materials in building design, procurement, construction, maintenance and end of life.

The above will be carried out by the design team in consultation with the relevant parties at each of the following RIBA stages:

- Preparation and Brief
- Concept Design
- Developed Design
- Technical Design
- Construction.

In total, one of one credit is currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Waste

Wst 01: Construction Waste Management — 5 of 7

Pre-Refurbishment Audit (one credit)
The design team will complete a pre-refurbishment audit of any existing buildings or hard surfaces being considered for demolition. This will be used to determine materials can be reused or recycled where possible, in line with BREEAM requirements.
One of one credit targeted.

Reuse and Direct Recycling of Materials (two credits)
50% of the total available points for the waste material types detailed in Table 65 in the BREEAM RFO 2014 manual , that are present on the project will be achieved (using the Wst 01 calculator tool).
One of two credits targeted.

Resource Efficiency (three credits)
The design team has confirmed that a BREEAM compliant resource management plan will be produced and will ensure that non-hazardous waste generated by the building's design and construction (excluding demolition and excavation waste) is less than 4.5m^3 (or 1.2 tonnes) per 100m^2 of gross internal floor area.
Two of three credits targeted.

Diversion of Resources from Landfill (one credit)
It is likely that at least 85% (by volume) or 90% (tonnage), for the refurbishment / fit out works, of non-hazardous construction waste generated will be diverted from landfill.
One of one credit targeted.

In total, five of seven credits are targeted for this issue.

Wst 02: Recycled Aggregates — 1 of 1

Recycled aggregates (one credit + Exemplary level criteria)

The total amount of recycled and/or secondary aggregate specified will be greater than 35% (by weight or volume) of the total high-grade aggregate specified for the development.

Additionally, for the exemplary level criteria the contributing recycled or secondary aggregate will not be transported more than 30 km by road transport. Please see Appendix B.

In total, one of one credit and one exemplary credit is currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Wst 03: Operational Waste 1 of 1

Mandatory Requirement:
One credit is required in order to achieve an Excellent rating.

The design team has confirmed that a dedicated recyclable waste storage area will be provided for the scheme. The space will be clearly labelled and accessible.

The design team will confirm whether a compactor/bailer and composting facilities will be provided.

In total, one of one credit is currently targeted for this issue.

Wst 05: Adaptation to Climate Change 1 of 1

Resilience of Structure, Fabric, Building Services and Renewables Installation (one credit)
The design team has confirmed that a climate change adaptation strategy will be undertaken for the development at present.
One of one credit targeted.

In total, one of one credit is currently targeted for this issue.

Wst 06: Functional Adaptability 1 of 1

Functional Adaptability (one credit)
The design team will conduct a study to explore the ease of functional adaptation of different scenarios before the end of Concept Design. Recommendations/solutions will be developed based on the study that aims to enable and facilitate future adaptation.
One of one credit targeted.

In total, one of one credit is currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Land Use and Ecology

LE 02: Protection of Ecological Features **1 of 1**

A suitably qualified ecologist will confirm the ecological value of the site.

In total, one of one credit is currently targeted for this issue.

LE 04: Change and Enhancement of Ecological Value **1 of 1**

The design team has confirmed that a suitably qualified ecologist will be appointed and the recommendations in their ecology report for the enhancement of site ecology will be implemented in the final design.

The ecologist will need to confirm that the ecological value of the site has increased as a result of the development.

In total, one of one credit is currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Pollution

Pol 01: Impact of Refrigerants — 1 of 3

Pre-requisite
All systems with electronic compressors will comply with the requirements of BS EN 378:2008 (parts 2 and 3) and, where systems containing ammonia are installed, the Institute of Refrigeration Ammonia Refrigeration Systems Code of Practice.

Impact of refrigerants (one credit)
It is confirmed that the cooling strategy of the scheme will have Direct Effect Life Cycle CO2 equivalent emissions (DELC CO2e) of ≤ 1000 kgCO2e/kW cooling/heating capacity.
One of two credits targeted.

Leak detection (one credit)
The design team will investigate the potential for leak detection to be targeted at design stage.
Zero of one credit targeted.

In total, one of three credits are targeted for this issue.

Pol 02: NOx Emissions — 0 of 3

The design team has confirmed that currently this credit is not being targeted.

Pol 03: Surface Water Run-Off — 3 of 5

Low Flood Risk (two credits)
The site is situated in a low flood risk area.
Two of two credits targeted.

Surface Water Run-Off (two credits)
There is not likely to be an increase in the impermeable surfaces as a result of the refurbishment works.
One of two credits targeted.

Minimising Watercourse Pollution (one credit)
This credit will be investigated further to determine if attenuation measures can be installed to ensure there is no discharge from the site for rainfall depths of up to 5mm.
Zero of one credit targeted.

In total, three of five credits currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Pol 04: Reduction of Night Time Light Pollution **1 of 1**

The design team has confirmed that external lighting will be designed and installed in compliance with ILP Guidance. All external lighting will have the capacity to be switched off automatically between 11pm and 7am. Any illuminated advertisements will be designed in compliance with ILP PLG 05.

In total, one of one credit is targeted for this issue.

Pol 05: Noise Attenuation **1 of 1**

A Suitably Qualified Acoustic Consultant will conduct a noise impact assessment in compliance with BS7445. Where noise sources from the development are greater than +5dB (during the day) and +3dB (during the night) compared to the background noise level, attenuation measures will be specified.

In total, one of one credit is currently targeted for this issue.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Appendix A

In order to meet the Man 04 credit requirements, all following contents list should be used:

Building User Guide	The aim of the Building User Guide is to ensure the appropriate provision of guidance for the non-technical building user, so they can access, understand and operate the building efficiently and in a manner in keeping with the original design intent. The guide should provide information relevant to the following stakeholders: • The building's staff (or where relevant residents) • The non-technical facilities management team/building manager • Other building users e.g. visitors / community users
Overview of building and its environmental strategy	Energy / water / waste efficiency policy / strategy and how users should engage with / deliver the policy/strategy.
Building services	The building services overview and access to controls (where to find them, what they control, how to operate effectively and efficiently etc.)
Access and security	Pre-arrival information for visitors e.g. access and security procedures / provisions
Shared facilities	Provision of and access to shared facilities
Safety and emergency information	Safety and emergency information / instructions
Operational procedures	Building related operational procedures specific to building type / operation e.g. labs.
Reporting arrangements	Building related incident reporting/feedback arrangements
Training information / links	Building related training information / links including information on legionella
Provision of and access to transport facilities	Provision of and access to transport facilities e.g. public transport, cyclist facilities, pedestrian routes etc.
Provision of and access to local amenities	Provision of and access to local amenities, e.g. supermarkets, ATM, etc.

Building User Guide	The aim of the Building User Guide is to ensure the appropriate provision of guidance for the non-technical building user, so they can access, understand and operate the building efficiently and in a manner in keeping with the original design intent. The guide should provide information relevant to the following stakeholders: • The building's staff (or where relevant residents) • The non-technical facilities management team/building manager • Other building users e.g. visitors / community users

Re-fit, refurbishment and maintenance arrangements	-
Links, references and relevant contact details	-

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Appendix B

In order to meet the Wst 02 credit requirements, the following minimum % levels of recycling or secondary aggregate must be met for each application (where present):

Application	Min. % One credit	Min.% Exemplary performance
	Bound	
Structural frame, including floor slabs	15%	30%
Bitumen or hydraulically bound base, binder, and surface courses for paved areas and roads	30%	75%
Building foundations	20%	35%
Concrete road surfaces	15%	45%
	Unbound	
Pipe bedding	100%	100%
Granular fill capping	100%	100%

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Appendix C

Ref	Product	Requirements
A	**Paints and varnishes**	
	Performance requirements	VOC content limit
	Compliant performance standard	EU Directive 2004/42/CE ('Paints Directive')
	Compliant testing standard	BS EN ISO 11890-2:2013 – Paints and varnishes – Determination of VOC content, Part 2 – Gas Chromatographic method OR ASTM D2369 - 10(2015) Standard Test Method for Volatile Content of Coatings (only where reactive diluents are present) OR Manufacturers' calculations of VOC content (based on the constituent ingredients)
	Manufacturer also to confirm	Paint to be fungal and algal resistant in wet areas e.g. bathrooms, kitchens, utility rooms
B	**Wood panels (including particle board, fibreboard including MDF, OSB, cement bonded particle board, plywood, solid wood panel and acoustic board)**	
	Option 1	
	Performance requirements	Formaldehyde E1 class
	Compliant performance standard	BS EN 13986:2004+A1:2015 Wood-based panels for use in construction - Characteristics evaluation of conformity and marking
	Compliant testing standard(s)	In accordance with Annex B of BS EN 13986:2004 A1:2015
	Manufacturer also to confirm	The absence of prohibited wood preservatives.
	Option 2	
	Performance requirements	Formaldehyde concentration in indoor air of 0.1mg/m^3
	Compliant testing standard(s)	1. BS EN ISO 16000-9:2006 Indoor air - Part 9: Determination of the emission of volatile organic compounds from building products and furnishing - Emission test chamber method. OR 2. Californian Department for Public Health Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.2 (Emission testing method for California Specification 01350), 2017. Note: For either method the resultant emission rate obtained from the chamber test method must be extrapolated to predict what the emissions would be in a theoretical model room (as detailed in the standard) and this extrapolated emission rate compared with the required formaldehyde concentration of 0.1mg/m^3.
	Manufacturer also to confirm	The absence of prohibited wood preservatives.
C	**Timber structures (e.g. glue laminated timber)**	
	Option 1	
	Performance requirements	Formaldehyde E1 Class
	Compliant performance standards	BS EN 14080:2013 Timber structures - Glued laminated timber and glued solid timber - Requirements
	Compliant testing standards	In accordance with Annex A of BS EN 14080:2013

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Ref	Product	Requirements
	Option 2	
	Performance requirements	As category B Option 2.
	Compliant testing standards	As category B Option 2.
D	Wood flooring (e.g. parquet)	
	Option 1	
	Performance requirements	Formaldehyde E1 Class
	Compliant performance standard	BS EN 14342:2013+A1:2008 Wood flooring - Characteristics, evaluation of conformity and marking
	Compliant testing standards	In accordance with Annex A of BS EN 14342:2013
	Option 2	
	Performance requirements	As category B Option 2.
	Compliant testing standards	As category B Option 2.
E	Resilient textile and laminated floor coverings (e.g. vinyl, linoleum, cork, rubber, carpet, laminated wood flooring)	
	Option 1	
	Performance requirements	Option 1 - Formaldehyde E1 Class
	Compliant performance standard	BS EN 14041:2018 Resilient, textile, laminate and modular multilayer floor coverings - Essential characteristics
	Compliant testing standards	In accordance with Section 4.3.3 of BS EN 14041:2018
	Option 2	
	Performance requirements	As category B Option 2.
	Compliant testing standards	As category B Option 2.
F	Suspended ceiling tiles	
	Option 1	
	Performance requirements	Formaldehyde E1 Class
	Compliant performance standard	BS EN 13964:2014 Suspended ceilings - Requirements and test methods
	Compliant testing standards	In accordance with Annex E of BS EN 13964:2014
	Option 2	
	Performance requirements	As category B Option 2.
	Compliant testing standards	As category B Option 2.
G	Flooring adhesives	
	Performance requirements	Carcinogenic or sensitising volatile substances are substantially absent
	Compliant performance standard	BS EN 13999-1:2013 Adhesives - Short term method for measuring the emission properties of low-solvent or solvent-free adhesives after application - Part 1: General procedure
	Compliant testing standard	1. BS EN 13999-1:2013 Adhesives - Short term method for measuring the emission properties of low-solvent or solvent-free adhesives after application - Part 1: General procedure 2. BS EN 13999-2:2013 Adhesives - Short term method for measuring the emission properties of low-solvent or solvent-free adhesives after application - Part 2: Determination of volatile organic compounds

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Ref	Product	Requirements
		3. BS EN 13999-3:2007+A1:2009 Adhesives - Short term method for measuring the emission properties of low-solvent or solvent-free adhesives after application - Part 3: Determination of volatile aldehydes 4. BS EN 13999-4:2007+A1:2009 Adhesives - Short term method for measuring the emission properties of low-solvent or solvent-free adhesives after application - Part 4: Determination of volatile diisocyanates
H	Wall coverings	
	Performance requirements	• Vinyl chloride monomer (VCM) content • Formaldehyde level • Migration of heavy metals
	Compliant performance standard	1. BS EN 233:2016 Wallcoverings in roll form - Specification for finished wallpapers, wall vinyls and plastics wall coverings 2. BS EN 15102:2019 Decorative wallcoverings - Roll form 3. BS EN 259-1:2001 Wallcoverings in roll form - Heavy duty wallcoverings - Part 1: Specifications
	Compliant testing standard	BS EN 12149:1998 – Wall coverings in roll form - Determination of migration of heavy metals and certain other elements, of vinyl chloride monomer and of formaldehyde release

Relevant standards - VOCs

All standards outlined the table are standards recognised across Europe and internationally for VOC content and testing. In instances where a product is not assessed against the listed European or International standard, it is acceptable to use an alternative, nationally recognised, standard provided the following is met as a minimum:

1. The performance level requirements required by the alternative standard are equivalent to or better than those specified in the standards in Table 20 . For example, if a material containing formaldehyde has been added to the floor covering product as part of the production process, then the E1 emission measured for formaldehyde must be less than 0.124mg/m3 (as required by BS EN 14041:2004).
2. Where an alternative standard omits evaluation of a particular material, it is only acceptable to use the alternative standard in instances where the product does not contain that particular material.

BREEAM assessors should seek confirmation from BRE Global Limited prior to awarding credits for compliance with standards not listed in Table 20 or previously approved as alternative nationally recognised standards.

Products with no formaldehyde containing materials

For some floor coverings and wood-based panels, the requirement for formaldehyde testing (referred to in the above criteria) does not apply to 'floor coverings to which no formaldehyde containing materials were added during production or post-production processing', or in the case of EN 13986:2004, wood-based panels.

As such, if a product manufacturer confirms that they have made a declaration of formaldehyde class E1 without testing (in writing or via a company product fact sheet or literature) then the product in question meets the BREEAM requirement relevant to formaldehyde testing. A declaration of E1 without testing is effectively confirmation from the manufacturer that formaldehyde emissions comply with the emission level requirements of the relevant standard(s) and therefore, evidence confirming the actual emission level(s) via testing will not be required by the assessor to demonstrate compliance with that particular requirement.

eight versa
+44 (0)20 7043 0418
info@eightversa.com

Appendix D

BREEAM acoustic criteria for Education buildings

The building meets the appropriate acoustic performance standards and testing requirements which defines criteria for the acoustic principles of:

a. Sound insulation
b. Indoor ambient noise level
c. Reverberation times.

Education buildings (three credits)	
First credit - Sound insulation	
Criteria	Achieve the performance standards set out in Section 1 of the Building bulletin 93: Acoustic design of schools: performance standards, February 2015[1] relating to airborne sound insulation between spaces and impact sound insulation of floors.
Testing requirement	A programme of pre-completion acoustic testing is carried out by a compliant test body in accordance with the BB93 requirements and the ANC Good Practice Guide, Acoustic testing of Schools[2].
Second credit - Internal indoor ambient noise levels	
Criteria	Achieve the indoor ambient noise level standards set out within Section 1 of BB93 for all room types. For lightweight roofs and roof glazing calculations using laboratory data with 'heavy' rain noise excitation as defined in BS EN ISO 140-18[3] are required (in accordance with the guidance in BB93) for teaching/learning spaces to demonstrate that the reverberant sound pressure level in these rooms are not more than 25 dB above the appropriate limits presented within Section 1 of BB93, table 1.
Testing requirement	Indoor ambient noise levels (excluding rain noise): A programme of acoustic measurements is carried out by a compliant test body in accordance with the ANC Good Practice Guide, Acoustic testing of Schools. Rain noise: installation of a specification compliant with the BB93 criteria demonstrates compliance, reference is also made to the notes below.
Notes	For heavy weight roofs, or parts of the roof that are heavyweight, with a mass per unit area greater than 150kg/m^2 (including those with sedum planting) that do not have any glazing or rooflights, calculations are not required, as such the credit can be awarded on a default basis of compliance.
Third credit - Reverberation	
Criteria	Acoustic environment (Control of reverberation, sound absorption and speech transmission index (STI)): **Teaching and study spaces:** achieve the requirements relating to reverberation time for teaching and study spaces set out within table 6 in Section 1 of BB93. **Open plan teaching spaces:** achieve the performance requirements relating to speech transmission index (STI) set out within Section 1.8 of BB93. **Corridor and stairwells:** for those that give direct access to teaching and study spaces, achieve the performance requirements relating to sound absorption.
Testing requirement	**Teaching and study spaces:** A programme of acoustic measurements is carried out by a compliant test body in accordance with the ANC Good Practice Guide, Acoustic testing of Schools. **Open plan teaching spaces:** STI Measurements of the STI should be taken in at least one in ten typical student listening positions in the open plan spaces in accordance with the ANC Good Practice Guide, Acoustic testing of Schools. **Corridors and stairwells:** Installation of a specification compliant with the BB93 criteria demonstrates compliance. Where this refers to the use of Building Regulations, the country-specific Building Regulations or standards can be applied.

eight versa

www.eightversa.com
020 7043 0418

24/07/2023

10271 – Belsize Studio

Design Stage Information Schedule

Target score: 71.69% EXCELLENT (minimum score required = 70%)
Score with all actions: 81.55% EXCELLENT (minimum score required = 70%)
Current score: 8.39% Unclassified (35% is required for PASS)

Stage 2 actions
Red writing = potential credits
Blue fill = complaince letter
Green fill = complete

General Documents						Information required	Responsibility
					☐	Contractor Compliance Letter / Employer's Requirements.	Contractor
					☐	Architect Compliance Letter	Architect
					☐	M&E Compliance Letter	M&E
					☐	Client Compliance Letter	Client
					☐	Construction programme of works	Contractor
					☐	Design Drawings – Architecture and M&E	Architect / M&E

Management			Available	Target	Action		Information required	Responsibility
Man 01	Project brief and design	Stakeholder Consultation (project delivery)	1	1	0	✓	A copy of the sustainability brief including: – Client requirements – Sustainability objectives (including BREEAM rating) – Timescales & budget – List of relevant consultees / professional appointments – Constraints to project (e.g. technical, legal, physical, environmental)	Project Manager / Architect
						✓	Design team roles and responsibilities schedule OR project directory	Project Manager
						☐	Written confirmation that roles and responsibilities were defined at each key phase of the project in accordance with BREEAM requirements.	Project Manager
						✓	Meeting minutes and drawings showing how contributions from the project team have influenced design, strategy and/or project plan.	Project Manager / Architect
		Stakeholder Consultation (third party)	1	1	0	☐	Consultation plan and list of third party stakeholders.	PM/Architect/DWD
						☐	All documentation used and collected during the consolation process outlining the process and what was discussed, e.g. Meeting minutes / agendas; Dated photos; Questionnaire results; Presentations	PM/Architect/DWD
						☐	Drawings / specifications showing changes to design as a result of consultation.	Project Manager / Architect
						☐	Consultation feedback to all third party stakeholders.	PM/Architect/DWD
						☐	Confirmation that the consultation process was carried out by Design Quality Indicator.	PM/Architect/DWD
		Sustainability Champion (design)	1	1	0	✓	Written confirmation that Eight Versa have been appointed in the role of BREEAM AP, and Sustainability Champion.	Project Manager
						✓	Meeting minutes demonstrating BREEAM AP attendance at key design team meetings.	Project Manager
						✓	Confirmation that BREEAM performance target of Excellent has been formally agreed between the client and project team.	Project Manager / Architect
		Sustainability Champion (monitoring progress)	1	1	0	✓	Formal report from BREEAM AP outlining progress of assessment.	Eight Versa
Man 02	Life cycle cost and service life planning	Elemental Life Cycle Cost (LCC)	2	2	0	☐	Elemental Life Cycle Cost analysis carried out (in line with PD 156865:2008) and covers:	Eight Versa
						☐	The building's basic structure and envelope, appraising a range of options and based on multiple cash flow scenarios (e.g. 20, 30, 50+ years).	Eight Versa
						☐	The building's fabric and servicing strategy outlining services component and fit–out options (if applicable) over a 15–year period.	Eight Versa
						☐	The building's fit–out strategy outlining fit–out options over a 10–year period.	Eight Versa
		Component LCC plan	1	1	0	☐	Component level life cycle cost plan (in line with PD 156865:2008) that includes the following component types (where present in scope of works): – Envelope (e.g. cladding, windows, and/or roofing) – Services (e.g. heat source cooling source, and/or controls) – Finishes (e.g. walls, floors and/or ceilings) – External spaces (e.g. alternative hard landscaping, boundary protection)	Specialist Consultant
						☐	Drawings/specification showing how the component level LCC plan has been used to minimise life cycle costs and maximise critical value.	Architect/MEP/Structural
		Report the capital cost for the building	1	1	0	☐	Written confirmation of the predicted capital cost (including contingencies) in pounds per square metre (£k/m2) and commitment to report the final capital cost at post–construction.	Cost Consultant

eight versa

www.eightversa.com
020 7043 0418

24/07/2023

10271 – Belsize Studio

Design Stage Information Schedule

Target score: 71.69% EXCELLENT (minimum score required = 70%)
Score with all actions: 81.55% EXCELLENT (minimum score required = 70%)
Current score: 8.39% Unclassified (35% is required for PASS)

Stage 2 actions
Red writing = potential credits
Blue fill = complaince letter
Green fill = complete

			Available		Action			
Man 03	Responsible construction practices	Pre-requisite: timber to be legally sourced	YES	**YES**	0	☐	Pre-requisite Commitment for all site timber to be FSC/PEFC certified.	Contractor
		Environmental Management	1	**1**	0	☐	Commitment that the Main Contractor will operate an ISO 14001 / EMAS or equivalent standard.	Contractor
						☐	Commitment that Main Contractor will follow pollution prevention policies (PPG 6).	Contractor
		Sustainability champion (construction)	1	**1**	0	☐	Confirmation that a BREEAM AP or BRE Site Sustainability Manager has been appointed as Sustainability Champion during construction	Contractor
						☐	Confirmation that the BREEAM target score will form a requirement of the Principal Contractor's contract	Contractor
		Considerate Construction	2	**2**	0	☐	Commitment for Contractor to achieve at least 35 points (with a minimum of 7 points in each section) under the Considerate Constructors Scheme.	Contractor
		Monitoring site impacts – Energy and Water	1	**1**	0	☐	Written commitment for Contractor to assign an individual to monitor, record and report on: – Energy consumption and carbon emissions (in kWh and kgCO2/project value) – Water consumption (in m3)	Contractor
		Monitoring site impacts – Transport	1	**1**	0	☐	Written commitment for Contractor to assign an individual to monitor, record and report on: – Transport of construction materials and waste (in litres of fuel used)	Contractor
Man 04	Commissioning and handover	Commissioning and Testing Schedule and Responsibilities	1	**1**	0	☐	Written commitment to develop a schedule of commissioning including timescales and appropriate standards for all commissioning activities.	M&E
						☐	Written commitment to appoint an appropriate member of the design team to monitor and programme pre-commissioning, commissioning and testing.	Project Manager / M&E
						☐	Project programme indicating allowance for all commissioning and testing activities prior to handover.	Project Manager
		Commissioning building services	1	**1**	0	☐	Complex building services and systems: Written commitment to appoint a specialist commissioning manager during design stage	Project Manager / Client
		Testing and inspecting building fabric	1	**1**	0	☐	Project programme and budget including allowance for Level 2 thermographic survey and airtightness testing at appropriate times during the refurbishment.	Project Manager
						☐	Commitment to rectify any defects identified in the thermographic survey and airtightness testing reports.	Project Manager / Architect
Man 04	Commissioning and handover	Handover	1	**1**	0	☐	Written commitment to produce a non-technical building user guide appropriate to the building type & users.	Project Manager / Contractor
						☐	Written commitment to produce a training schedule for building occupiers/premises managers, which includes the following content as a minimum: – The building's design intent – The available aftercare provision and aftercare team main contact(s), including any scheduled seasonal commissioning and post occupancy evaluation – Introduction to, and demonstration of, installed systems and key features, particularly building management systems, controls and their interfaces – Introduction to the Building User Guide and other relevant building documentation – Maintenance requirements, including any maintenance contracts and regimes in place.	Project Manager
Man 05	Aftercare	Aftercare Support	1	**1**	0	☐	Written commitment to put in place an aftercare contract to provide support to the building occupier, including: – a meeting just before or just after occupation – facilities management training, building walk round – aftercare support for one month after occupation and examine how building is being used and systems are operating – longer term after care for first 12 months after occupation	Client
						☐	Written commitment to: – Collect energy and water consumption data for a minimum of 12 months once the building is occupied. – Identify any discrepancies between actual and predicted performance and identify actions to address these discrepancies.	Client
		Seasonal Commissioning	1	**1**	0	☐	Complex systems: written confirmation that a specialist commissioning manager will be appointed to carry out seasonal commissioning activities for all complex systems over a minimum 12-month period, once the building becomes substantially occupied.	Client
		Post Occupancy	1	**1**	0	☐	Commitment to carry out a post-occupancy evaluation exercise one year after PC.	Client
						☐	Commitment to carry out the appropriate dissemination of information on the building's post occupancy performance.	Client

eight versa

www.eightversa.com
020 7043 0418

24/07/2023

10271 – Belsize Studio

Design Stage Information Schedule

Target score: 71.69% EXCELLENT (minimum score required = 70%)
Score with all actions: 81.55% EXCELLENT (minimum score required = 70%)
Current score: 8.39% Unclassified (35% is required for PASS)

Stage 2 actions
Red writing = potential credits
Blue fill = complaince letter
Green fill = complete

Health And Wellbeing			Available		Action	Information required	Responsibility
Hea 01	Visual comfort	Glare Control	1	**1**	0	☐ Written confirmation that compliant shading measure will be installed in all relevant areas to minimise glare.	Architect
						☐ Drawings confirming location / design of shading system.	Architect
						☐ Written confirmation that the glare control strategy will be designed to maximise daylight levels under all conditions, will not inhibit daylight from entering the space under cloudy conditions (or when sunlight is not on the façade) and will not conflict with the operation of lighting control systems.	Architect
		Daylighting	3	**0**	1	☐ BREEAM-compliant daylighting calculations.	M&E
						☐ BREEAM Hea 01 calculator confirming daylighting provision.	Architect / M&E
		Internal lighting levels, zoning & controls	1	**1**	0	☐ Written confirmation / specification confirming that all fluorescent and compact fluorescent lamps will be fitted with high frequency ballasts and will meet luminance levels in accordance with the SLL Code for Lighting 2012 and any other relevant industry standard.	M&E
						☐ For areas where computer screens are regularly used: written confirmation / specification confirming that the lighting design will comply with CIBSE Lighting Guide 7 (sections 3.3, 4.6, 4.7, 4.8 and 4.9).	M&E
						☐ Written confirmation / specification that external lighting will be specified in accordance with BS 5489-1:2013 'Lighting of roads and public amenity area' and BS EN 12464-2:2014 'Light and lighting - Lighting of work places - Part 2: Outdoor work places'.	M&E
						☐ Lighting schedule and layout drawings showing lighting zones and their occupant controls in accordance with BREEAM criteria.	M&E
						☐ Written confirmation / specification confirming that all areas used for teaching, seminar or lecture purposes have lighting controls are in accordance with CIBSE Lighting Guide 5.	M&E
						☐ Written confirmation that manual lighting controls will be easily accessible for the teacher while teaching and on entering and leaving the teaching space.	M&E
Hea 02	Indoor air quality	Minimising Sources of Air Pollution: Indoor Air Quality Plan	1	**1**	0	☐ Copy of the indoor air quality plan	Contractor
		Ventilation	1	**0**	1	☐ Written confirmation / calculations to confirm that fresh air will enter the building in accordance with relevant standards for ventilation.	M&E
						☐ An annotated drawing showing: air intakes and exhausts are over 10m apart and over 20m from sources of external pollution AND that the location of the building's air intakes and exhausts, in relation to each other and external sources of pollution, is designed in accordance with BS EN 13779:200.	M&E
						☐ If HVAC systems are present: Written confirmation / specification clause confirming that HVAC systems will incorporate suitable filtration to minimise external air pollution, as defined in BS EN 13779:2007 Annex A3.	M&E
						☐ For areas of the building subject to variable occupancy patterns: drawings/specification showing carbon dioxide (CO_2) or air quality sensors (or written confirmation that no such building areas exist).	M&E
		VOC emission levels(products)	1	**1**	0	☐ Written confirmation / specification extract confirming that all decorative paints and varnishes AND at least five of the seven remaining categories of finishes products (e.g. wood panels/flooring) are specified to meet the BREEAM criteria.	Architect / Contractor
		VOC emission levels(post-construction)	1	**0**	1	☐ Commitment to carry out VOC testing post-construction and that where VOC and formaldehyde levels are found to exceed the specified limits a commitment to reduce levels (including re-measurement).	Contractor
		Adaptability - Potential for Natural Ventilation	1	**0**	1	☐ For occupied spaces: - Confirmation that room depths have been designed in accordance with CIBSE AM10 (section 2.4) and drawings confirming openable window area in each space is equivalent to at least 5% of the GIA. OR - Calculations from a ventilation design tool demonstrating adequate cross-flow.	M&E
						☐ Calculations / drawings demonstrating local services have been designed to provide fresh air ventilation in accordance with CIBSE AM10.	M&E
						☐ Drawing plan / specification confirming natural ventilation strategy has at least two levels of user control	M&E
Hea 04	Thermal comfort	Thermal Modelling	1	**1**	0	☐ Full dynamic thermal modelling results carried out in accordance with CIBSE AM11 confirming that temperature ranges are in accordance with CIBSE Guide A (and CIBSE TM52 where applicable).	
						☐ Where undertaking a Part 4 assessment: Meeting mins/report/email correspondence confirming that a competent person has assessed the suitability of existing building services and controls to identify any changes that may be required as a result of fit-out works.	M&E
						☐ For air-conditioned buildings: results confirming PMV and PPD indices based on the above modelling.	M&E
		Adaptability - Thermal Model for climate change scenario	1	**1**	0	☐ Thermal modelling results including allowance for a projected climate change environment.	M&E
						☐ Where thermal comfort criteria are not met for the projected climate change environment: drawings/report demonstrating how the building has been adapted, or designed to be easily adapted in the future using passive design solutions.	M&E
						☐ For air-conditioned buildings: results confirming PMV (predicted mean vote) and PPD (predicted percentage of dissatisfied) indices based on the modelling including allowance for a projected climate change environment.	M&E
		Thermal zoning and controls	1	**1**	0	☐ Written confirmation that the thermal modelling analysis has informed the temperature control strategy.	M&E
						☐ Thermal comfort strategy.	M&E
						☐ Drawing plans / specification confirming heating / cooling systems, zones and controls	M&E
Hea 05	Acoustic performance		3	**3**	0	☐ Acoustician's report confirming bespoke acoustic standards have been met, in line with Acoustician's criteria, for the acoustic principle of indoor ambient noise, sound insulation and reverberation times (where appropriate).	Acoustician

eight versa

www.eightversa.com
020 7043 0418

24/07/2023

10271 – Belsize Studio

Design Stage Information Schedule

Target score: 71.69% EXCELLENT (minimum score required = 70%)
Score with all actions: 81.55% EXCELLENT (minimum score required = 70%)
Current score: 8.39% Unclassified (35% is required for PASS)

Stage 2 actions
Red writing = potential credits
Blue fill = complaince letter
Green fill = complete

			Available		Action		Information required	Responsibility
Hea 06	Safety and security	Security of site and building	1	1	0	✓	Security Needs Assessment (SNA) report carried out by an ALO / CPDA including recommendations for the building.	Suitably Qualified Security Specialist
						✓	Project programme including appointment of security specialist at RIBA Stage 2	Project Manager
						✓	Meeting mins or drawings confirming the recommendations made by the security specialist have been implemented.	Project Manager / Architect
Energy							**Information required**	**Responsibility**
Ene 01	Reduction of energy use and carbon	Energy Use & Carbon Emissions – whole building approach	15	10	5	☐	Design stage BRUKL and EPC from approved software for proposed and existing building (.inp and .pdf format)	Energy Assessor
Ene 02	Energy monitoring	Sub-metering of major energy consuming systems	1	1	0	☐	Written confirmation that all major energy consuming systems (i.e. heating, cooling, lighting, power, fans, domestic hot-water, lifts) will be sub-metered. For systems that aren't sub-metered, calculations must be provided to confirm that the energy use is less than 10% for these system, in comparison to the total build energy use.	M&E
						☐	Electrical layouts/schematics and specification showing the position of all energy meters and their connection to an energy management system (i.e. BMS).	M&E
						☐	Written confirmation / specification clause confirming all end energy consuming uses are identifiable to the building users.	M&E
		Sub-metering of high energy load and tenancy areas	1	1	0	☐	Electrical layouts showing location of sub-meters for high energy load and tenancy areas.	M&E
						☐	Written confirmation / specification clause confirming there will be separate accessible energy sub-meters (with pulsed output) or an energy management system covering tenanted areas OR relevant function areas / departments that use a significant majority of the buildings energy supply.	M&E
Ene 03	External lighting	External Lighting	1	1	0	☐	Marked up site plans showing location and type of all external light fittings.	M&E / Architect
						☐	Confirmation that that average luminous efficacy of external light fittings will be greater than 60 luminaire lumens per circuit Watt.	M&E
						☐	Written confirmation that all external light fittings will be automatically controlled by a timer clock/daylight sensor and presence detection.	M&E
Ene 04	Low carbon design	Passive Design Analysis	1	1	0	✓	Passive design analysis report.	M&E / Passive Design Consultant
						☐	Annotated drawings confirming the implementation of one or more passive design measure.	M&E
						✓	Calculations confirming that passive design measures demonstrate a meaningful reduction to overall building energy demand and/or CO2 emissions (i.e. 5% reduction).	M&E
		Free cooling	1	0	1	☐	Passive design report includes an analysis of free cooling.	Passive Design Consultant
						☐	Confirmation that the building does not use active cooling or mechanical ventilation.	M&E
						☐	Results from a dynamic simulation model demonstrating the feasibility of the free cooling strategy and meeting the first credit for Hea 04.	M&E
		LZC specification	1	1	0	✓	LZC feasibility study.	Energy Assessor
						☐	Annotated drawings or specification document showing LZC technology.	M&E / Architect
						✓	Calculations showing that the specified LZC makes a meaningful reduction in regulated carbon dioxide emissions (min 5%).	Energy Assessor
Ene 06	Energy efficient transportation systems	Energy Consumption	1	1	0	☐	An analysis of the transport demand and usage patterns of lift movement for the building.	Lift Consultant / M&E
						☐	Calculations showing the energy consumption has been estimated for at least two types of system in accordance with BS EN ISO 25745 Energy performance of lifts, escalators and moving walks.	Lift Consultant
						☐	Lift consultant's report confirming the system with the lowest energy consumption has been specified and that regenerative drive technology has been considered.	Lift Consultant
		Energy efficient features	2	2	0	☐	Specification document including at least two of the following energy efficient features: – The lifts operate in standby mode – Lift car lighting has an average lamp efficacy of >55 lamp lumens / circuit Watt – The lift drive controller is capable of variable speed, variable-voltage, and variable frequency – Regenerative drive technology must be specified where it can be demonstrated to save energy	M&E

eight versa

www.eightversa.com
020 7043 0418

24/07/2023

10271 – Belsize Studio

Design Stage Information Schedule

Target score: 71.69% EXCELLENT (minimum score required = 70%)
Score with all actions: 81.55% EXCELLENT (minimum score required = 70%)
Current score: 8.39% Unclassified (35% is required for PASS)

Stage 2 actions
Red writing = potential credits
Blue fill = complaince letter
Green fill = complete

			Available		Action			
Ene 08	Energy efficient equipment	Energy Efficient Equipment	2	0	2	☐	Written confirmation / calculations confirming which of the building's unregulated energy consuming loads contributes the greatest proportion of the total annual unregulated energy consumption of the development and its operation.	Energy Assessor
						☐	Confirmation of the energy saving solutions that will be implemented for unregulated energy demand.	Client / Project Manager
						☐	Calculations showing the reduction in total unregulated energy consumption resulting from the above energy saving measures.	Energy Assessor
Transport							**Information required**	**Responsibility**
Tra 01	Sustainable transport solutions	Accessibility Index	3	3	0	✓	PTAL report OR bus timetables and site location map	Eight Versa
Tra 02	Proximity to amenities	Distance to local amenities	1	1	0	✓	Site map showing location of relevant BREEAM-compliant amenities and distance from main entrance to building.	Eight Versa
Tra 03	Cyclist facilities	Cycle storage	1	1	0	☐	Written confirmation of the number of building users for the assessed development and number of compliant cycle spaces	Project Manager / Architect
						☐	Drawing plan showing the location of the cycle racks and the number of compliant racks provided.	Architect
						☐	Written commitment / specification clause following site inspection confirming that cycle storage spaces will be adequately spaced, covered overhead and lit in accordance with BS 5489-1:2013 Lighting of roads & public amenity areas and BS EN 12464-2:2014.	M&E / Architect
		Cyclist facilities	1	1	0	☐	Written confirmation / specification extract following site inspection confirming that at least two of the following facilities have been included within building design and meet the BREEAM requirements: – showers, changing facilities, lockers, drying space	Architect
						☐	Drawing showing the location of BREEAM-compliant cyclist facilities	Architect
Tra 05	Travel plan	Travel Plan	1	1	0	☐	A copy of the BREEAM-compliant Travel Plan (and site specific travel assessment) including measures to encourage the use of sustainable modes of transport.	Travel Consultant
						☐	Marked-up drawings highlighting examples of design measures implemented in support of the travel plans findings	Architect
						☐	Confirmation that the travel plan will be implemented post-refurbishment.	Client
Water							**Information required**	**Responsibility**
Wat 01	Water consumption	Water consumption	5	3	0	☐	Written confirmation of the specification of all water-consuming components devices AND where any fittings/devices are being retained details of water-saving technology to be installed. This includes the following (where applicable): WCs, urinals, taps, showers, baths, dishwashers, washing machines.	Architect
Wat 02	Water monitoring	Water monitoring	1	1	0	☐	Written confirmation / specification confirming that a new accessible, pulsed water meter will be installed on the mains water supply to the building	M&E
						☐	M&E drawings / schematic showing location of water meters	M&E
						☐	Written confirmation / specification confirming that accessible sub-meters will be installed for all plant and/or building areas consuming more than 10% of the building's total demand.	M&E
						☐	Written confirmation / specification confirming that each meter has a pulsed output to allow future connection to a BMS system	M&E
Wat 03	Water leak detection	Leak detection system	1	1	0	☐	Written confirmation / specification confirming the installation of a water leak detection system on the mains water supply to the building.	M&E
		Flow control devices	1	1	0	☐	Written confirmation / specification confirming the installation of a sanitary supply shut-off system to all toilet areas.	M&E
Materials							**Information required**	**Responsibility**
Mat 01	Environmental impact of materials	Elemental assessment of environmental performance information	6	2	0	☐	Completed Materials Information Table (template to be issued by Eight Versa) detailing percentages of materials re-used and percentages of new materials with robust environmental performance information.	Architect
						☐	Evidence of environmental performance information (e.g. Environmental Product Declarations in line with ISO 158094, ISO 14025, ISO 14024; or self declared recycled content in line with ISO 14021).	Eight Versa
Mat 03	Responsible sourcing of materials	Pre-requisite: all timber to be legally sourced	YES	YES	0	☐	Written confirmation / specification extract confirming that timber and timber-based products used on the project will be legally harvested and traded.	Contractor
		Sustainable Procurement Plan	1	1	0	☐	Copy of the principal contractor's sustainable procurement plan.	Contractor
		Responsible sourcing of materials (RSM)	3	2	0	☐	Completed Mat 03 table detailing percentage of each material used on site and supplier / responsible sourcing information. (Template to be issued by Eight Versa)	Architect / Contractor
						☐	Written confirmation that all materials will be responsibly sourced in accordance with the principal contractor's sustainable procurement plan	Contractor
						☐	Completed Mat 03 calculator tool	Eight Versa
Mat 04	Insulation	Embodied Impact of insulation	1	1	0	☐	Mat 04 Table (template to be issued by Eight Versa) detailing insulation specified for the building fabric and services.	Architect / M&E
						☐	Manufacturers details confirming the thermal conductivity of insulation specified.	Contractor
						☐	Completed Mat 04 calculator tool	Eight Versa

eight versa

www.eightversa.com
020 7043 0418

24/07/2023

10271 – Belsize Studio

Design Stage Information Schedule

Target score: 71.69% EXCELLENT (minimum score required = 70%)
Score with all actions: 81.55% EXCELLENT (minimum score required = 70%)
Current score: 8.39% Unclassified (35% is required for PASS)

Stage 2 actions
Red writing = potential credits
Blue fill = complaince letter
Green fill = complete

			Available		Action		Information required	Responsibility
Mat 05	Designing for durability and resilience	Designing for durability and resilience	1	1	0	☐	Design drawings marked up to show vulnerable areas of the building such as high use (entrance) doors and corridors, or areas where vehicles can manoeuvre close to the building fabric.	Architect
						☐	Drawings / specification clauses demonstrating robustness measures specified in the final design (e.g. kick plates / hard-wearing flooring / severe duty corridor walls / bollards / raised kerbs).	Architect
						☐	Confirmation of the relevant environmental factors which will considered when selecting materials for exposed elements.	Architect
						✓	Survey report confirming: a) Existing building elements that are exposed to any relevant environmental factors b) Status of existing elements – severity of any degradation has been graded c) (Where relevant) justification of why it is not feasible to implement measures to limit material degradation for existing elements	Eight Versa
Mat 06	Material efficiency	Material efficiency	1	1	0	✓	Must be carried out at each RIBA Stage (1-5): material efficiency report (and meeting minutes / drawings where relevant) confirming that opportunities have been identified, and appropriate measures implemented, to optimise the use of materials.	Eight Versa
Waste							**Information required**	**Responsibility**
Wst 01	Project waste management	Pre-refurbishment audit	1	1	0	✓	A copy of the BREEAM-compliant pre-refurbishment waste audit carried out at RIBA Stage 2. This must be referenced within the Resource Management Plan	Waste Contractor
		Reuse and direct recycling of materials	2	1	1	☐	Completed Wst 01 Table confirming the material that will be either directly re-used on-site or off-site OR details of material that will be sent back to the manufacturer for closed loop recycling.	Project Manager / Client
						☐	Completed Wst 01 calculator tool	Eight Versa
		Resource efficiency – Resource Management Plan	3	2	0	☐	A copy of the resource management plan (including reference to the pre-refurbishment audit). OR Written commitment to produce Resource Management Plan	Contractor
						☐	Written confirmation of the maximum amount of non-hazardous construction waste to be generated per 100m2 of gross internal floor area.	Contractor
		Diversion of resources from landfill	1	1	0	☐	Written commitment confirming the percentage of non-hazardous construction and demolition waste to be diverted from landfill (reused / recycled / returned / recovered, etc.)	Contractor
Wst 02	Recycled aggregates	Recycled aggregates	1	1	0	☐	Written confirmation / specification / calculations confirming the amount of recycled or secondary aggregate to be used (25%).	Contractor / Civil
						☐	Written confirmation confirming the source of the recycled / secondary aggregates.	Civil
Wst 03	Operational waste	Operational Waste	1	1	0	☐	Drawings showing area of dedicated space for storage of operational waste and recycling space.	Architect
						☐	Written confirmation / specification confirming that the space will be: – Clearly labelled, to assist with segregation, storage and collection of the recyclable waste streams – Accessible to building occupants or facilities operators for the deposit of materials and collection – Of an appropriate capacity	Architect
						☐	Confirmation that the building's operation will not generate a consistent waste stream OR if there is a consistent waste stream details of the facilities provided to manage this.	Architect
						☐	Where large volumes of waste produced written confirmation / specification confirming details of: – waste compactor / baler – composting facilities / food waste storage space AND provision of water outlet	Architect
Wst 05	Adaptation to climate change	Structural and fabric resilience	1	1	0	✓	Climate change adaptation strategy for structural and fabric resilience (including extreme weather risk assessment).	Eight Versa / Climate Change Consultant / M&E
Wst 06	Functional adaptability	Functional adaptability	1	1	0	✓	Functional adaptability strategy and implementation plan report outlining recommendations of measures to be incorporated to facilitate future adaptation	Eight Versa
						☐	Drawings showing adaptation measures have been adopted in the design in accordance with the functional adaptation strategy recommendations, where practical and cost effective. Omissions have been justified in writing to the assessor.	Architect
Land Use and Ecology							**Information required**	**Responsibility**
LE 02	Protection of ecological features	Protection of ecological features	1	1	0	☐	Ecologist's report confirming whether there are any features of ecological value present on site.	Ecologist
						☐	If features of ecological value are present then a copy of the recommendations for protecting these existing features during the refurbishment works.	Ecologist
						☐	Written commitment confirming that all recommendations of the ecologist for protection of ecological features will be followed prior to site works	Contractor
LE 04	Enhancing site ecology	Ecologist's report and recommendations	1	1	0	☐	Ecologist's report on enhancing site ecology	Ecologist
						☐	Written commitment to implement the recommendations in the ecologist's report.	Contractor

eight versa

www.eightversa.com
020 7043 0418

24/07/2023

10271 – Belsize Studio

Design Stage Information Schedule

Target score: 71.69% EXCELLENT (minimum score required = 70%)
Score with all actions: 81.55% EXCELLENT (minimum score required = 70%)
Current score: 8.39% Unclassified (35% is required for PASS)

Stage 2 actions
Red writing = potential credits
Blue fill = complaince letter
Green fill = complete

Pollution			Available		Action	Information required	Responsibility
Pol 01	Impact of refigerants	Impact of refrigerant	2	**1**	0	☐ Written confirmation that all systems (with electric compressors) will comply with the requirements of BS EN 378:2008 (parts 2 and 3) and any refrigeration systems containing ammonia will comply with The Institute of Refrigeration Ammonia Refrigeration Systems Code of Practice.	M&E
						☐ Completed Pol 1 table (Eight Versa to issue) confirming refrigerant specification, including: – Direct Effect Life Cycle CO2 equivalent emissions – kgCO2e/kW	M&E
						☐ Completed Pol 01 calculator tool confirming either: – Two credits: Direct Effect Life Cycle CO2 equivalent emissions (DELC CO2eq) of ≤ 100 kgCO2eq/kW cooling/heating capacity – One credit: DELC CO2eq of ≤ 1000 kgCO2eq/kW cooling/heating capacity	Eight Versa
		Leak detection	1	**0**	1	☐ Specification document confirming details of leak detection system.	M&E
						☐ If awarding the leak detection credit by default – Written confirmation / specifications confirming that either: – The refrigerant charge in each unit is less than 6kg – Only natural and environmentally benign refrigerants are specified (e.g. air/water)	M&E
Pol 03	Flood risk & surface fun–off	Low Flood Risk	2	**2**	0	☐ Flood risk assessment confirming the refurbishment or fit–out is situated in a flood zone that is defined as having a low annual probability of flooding.	Flood Risk Consultant
		Neutral Impact on surface water – 1 Credit	2	**1**	0	☐ If no increase in impermeable surface: Drawing plans flood risk assessment showing there is no increase in the impermeable surfaces as a result of the refurbishment works.	Architect
Pol 04	Reduction of night time light pollution		1	**1**	0	☐ Drawing plans showing the location of external lighting	Architect
						☐ Written confirmation / specification confirming that the external lighting strategy will be designed in compliance with Table 2 (and its accompanying notes) of the ILP Guidance notes for the reduction of obtrusive light, 2011.	M&E
						☐ Specification confirming that all external lighting (except for safety and security lighting) will automatically switch off between 23:00 and 07:00.	M&E
						☐ Written confirmation / specification confirming that 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 in Table 2 of the ILP's Guidance notes.	M&E
						☐ Confirmation that all illuminated advertisements (where specified) will be designed in compliance with ILE Technical Report 5 – The Brightness of Illuminated Advertisements.	M&E
Pol 05	Reduction of noise pollution	Noise–sensitive buildings AND externally mounted plant	1	**1**	0	☐ Noise impact assessment in compliance with BS7445 confirming the noise level from the existing site and the proposed site/building.	Acoustician
						☐ Where noise levels are greater than allowed under BREEAM confirmation that attenuation measures (as recommended in the noise impact assessment) will be implemented.	Contractor

Innovation – 1.0% per credit						Information required	Responsibility
Inn 01		Man 03 Exemplary Level	1	**1**	0	☐ CCS score at least 39 with 13 points in each section	Contractor
Inn 08		Wst 02 Exemplary level	1	**1**	0	☐ As above but to meet exemplary levels (35%).	Civil
						☐ Confirmation that the contributing recycled or secondary aggregate must not be transported more than 30 km by road transport.	Contractor / Civil