

10429	23 -10429 - 65 Northcourt Avenue	BREEAM New Construction 2018 - Design Stage - Ver 1 19/07/23 (Fully Fitted)										
Credit	Criteria	Available Credits	Credits likely /	% per credit	Responsibility	Design Stage Evidence Requirement	Post Construction Stage Evidence Required	Credits awarded	% Achieved	Credit Stage	Evidence needed	
Management												
Man 1 Project Brief and Design	One Credit: Stakeholder Consultation: Prior to completion of the Concept Design (RIBA Stage 2 or equivalent), the project delivery stakeholders have met to identify and define their roles, responsibilities and contributions for each of the key phases of project delivery, considering the following: a. End user requirements b. Aims of the design and design strategy c. Particular installation and construction requirements/limitations d. Occupiers' budget and technical expertise in maintaining any proposed systems e. Maintainability and adaptability of the proposals f. Requirements for the production of project and end user documentation g. Requirements for commissioning, training and aftercare support. Demonstrate that the consultation process has influence or changed the project brief, execution plan, communication strategy and the concept design	1	1	0.52	Project Manager / Client	Consultation plan setting out the process and scope of the consultation PLUS One or more appropriate evidence types; suggested: Communication records/meeting minutes. Contractual tree Relevant sections of the contract	As per design stage.	0	0.00	Early Stage Credit	Construction programme, design and access statement, base specification, meeting minutes records - early stages, directory Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities. Planning meeting and approval Design stage: Complete Man 01 templates and date to early concept stage: "Man 01 Roles for project delivery stakeholders" "Man 01 Meeting Minute Template" "Man 01 BREEAM_2018_Man 01_Project Execution Plan" "Man 01 BREEAM_2018_Man 01_Communication Strategy" Contractual evidence of BREEAM in planning documents Evidence of planning meeting and approval document Concept design drawings	
	One Credit: Stakeholder consultation Prior to completion of the Concept Design stage, all relevant third party stakeholders have been consulted by the design team. The minimum consultation content of the consultation plan will be dependent on the building but would typically include the following: 1. Functionality, build quality and impact (including aesthetics). 2. Provision of appropriate internal and external facilities (for future building occupants and visitors/users). 3. Management and operational implications. 4. Maintenance resources implications. 5. Impacts on the local community, e.g. local traffic/transport impact. 6. Opportunities for shared use of facilities and infrastructure with the community/appropriate stakeholders, if relevant/appropriate to building type. 7. Compliance with statutory (national/local) consultation requirements. 8. Inclusive and accessible design. In the case of educational building types, minimum content also includes: 9. How the building/grounds could best be designed to facilitate learning and provide a range of social spaces appropriate to the needs of pupils, students and other users. In the case of building types containing technical areas or functions, e.g. laboratories, workshops etc., minimum content also includes: 10. The end users broad requirements for such facilities, including appropriate sizing, optimisation and integration of equipment and systems. Lastly, demonstrate how stakeholder contributions and outcomes have influenced/changed the brief/design and prior to RIBA stage 4 give feedback	1	1	0.52	Client / Architect	Communication records/meeting minutes. Communication strategy Design programme/matrix	As per design stage.	0	0.00	Early Stage Credit	Complete template after stakeholder meeting undertaken by a third party. Or by a project team member with non conflict of interest statement	
	One Credit: Sustainability Champion to be appointed during stage 1. The defined BREEAM target performance are formally agreed no later than RIBA stage 2. At interim design stage the BREAM targets must be demonstrably achieved by the project team	1	1	0.52	BREEAM AP	Commitment letter of appointed person Plus evidence that target are met - Champion's report	Post Construction Stage Report	0	0.00		Complete Man 01 letter '01 Sustainability Champion (2)' '01 Sustainability Champion' Appoint AP and more AP reports	
	One Credit: Sustainability Champion (achieve the above credit) and to monitor the progress and formally report to client and design team	1	1	0.52	BREEAM AP	Commitment letter of appointed person Plus evidence that target are met - Champion's report	Post Construction Stage Report.	0	0.00		Complete Man 01 letter Apoin AP and more AP reports	

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Man 2 Life Cycle Cost and Service Life Planning	Two Credits - A Life Cycle Cost (LCC) analysis has been carried out at RIBA Stage 2 together with any design option appraisals in line with 'Standardised method of life cycle costing for construction procurement' PD 156865:20081. The LCC analysis shows: a. An outline LCC plan for the project based on the building's basic structure and	2	2	1.05	Specialist Consultant	Elemental life cycle cost plan	As per design stage.	0	0.00	Early Stage Credit	Complete Elemental LCC template by suitable author.	
	One Credit - The analysis demonstrates that all constituent elements in at least two out of the four categories a) to d) have been analysed at a strategic and system level, comparing alternative options: a. Envelope	1	1	0.52	Specialist Consultant	Component level life cycle cost plan.	As per design stage.	0	0.00		Complete Component level version of the template	
	One Credit - Report the capital cost for the building in £/ m ² , via the BREEAM Assessment Scoring and Reporting tool.	1	1	0.52	Project Manager / Client	Programme/ formal document confirming capital cost.	As per design stage.	0	0.00		Complete DS Letter '02 BREEAM_2018_Man 02_Capital Cost'	
Man 3 Responsible Construction Practices	Pre-requisite - All timber and timber-based products used on the project is 'legally harvested and traded timber' One Credit - The principal contractor operates an environmental management system (EMS) covering their main operations. The EMS must be either: ISO 14001/ EMSA or equivalent + compliance with BS8555:2003 and reached phase 4. The principal contractor implements best practice pollution prevention policies and procedures on-site in accordance with PPG6.	1	1	0.52	Main contractor	Commitment that all timber used will be compliant. ISO 14001 certificate.	Chain of Custody certificates for all timber used.	0	0.00		complete letter '03BREEAM_2018v1_Compliance_Proforma_Man03_01' complete letter 'Design Stage Letter' and 'Man 03 Legal and Sustainable Timber Letter' ISO 14001 certificate of main contractor if known	
	One Credit - Sustainability Champion appointed to monitor the targets set in Man 01 until stage RIBA 5 and 6. The targets are part of the contractors contract. At final construction the BREEAM targets must demonstrated as achieved. Sustainability Champions are members of formal schemes approved by the BRE. At present the following scheme are deemed to satisfy this requirement: *BREEAM Accredited Professional. *BRE Site Sustainability Manager Membership Scheme.	1	1	0.52	Main contractor	Commitment that a Sustainability Champion will be appointed.	Evidence of Sustainability Champion actions.	0	0.00		Provide evidence of appointment of Site BREEAM AP and evidence of their qualification	
	Up to two credits - Principal contractor has used a Considerate Construction Scheme(CCS) and achieve 'compliance' with criteria 7 to 9 including (but not limited)- Company's policy and procedure documents (including environmental management, pollution prevention, security) - Vehicle movement - Pollution management - Tidiness - Health and Wellbeing - Security process - Training awareness and feedback - Monitoring and reporting Refer to criteria list. For two credits, achieve six additional credits from the criteria table.	2	2	1.05	Main contractor	Commitment to adhere to CCS scheme. First site report (if available).	Final CCS site monitors report and certificate.	0	0.00		complete letter 'Design Stage Letter' Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	

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Men 4 Commissioning and Handover	One Credit - Monitoring utility consumption - Monitor and record data on principal constructor's and subcontractors' energy consumption in kWh (and where relevant, litres of fuel used) as a result of the use of construction plant, equipment (mobile and fixed) and site accommodation. Monitor and record data on principal constructor's and subcontractors' potable water consumption (m3) arising from the use of construction plant, equipment (mobile and fixed) and site accommodation. One Credit - Monitor transport consumption data - Monitor and record data on transport movements and impacts resulting from delivery of the majority of construction materials to site and construction waste from site. As a minimum this must cover: a. Transport of materials from the factory gate to the building site, including any transport, intermediate storage and distribution. b. Scope of this monitoring must cover the following as a minimum: i. Materials used in major building elements, including insulation materials. ii. Ground works and landscaping materials. c. Transport of construction waste from the construction gate to waste disposal processing/recovery Centre gate. Scope of this monitoring must cover the construction waste groups outlined in the project's waste management plan.	2	2	1.05	Main contractor	Commitment to monitor and report site consumption data.	Final site consumption data.	0	0.00		complete letter 'Design Stage Letter' complete letter 'Design Stage Letter - Commissioning Appointment NC' Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	
	One credit - Commissioning and testing schedule and responsibilities - A schedule of commissioning and testing that identifies and includes a suitable timescale for commissioning and recommissioning of all complex and non-complex building services and control systems and testing and inspecting building fabric. The schedule will identify the appropriate standards that all commissioning activities will be conducted in accordance with, such as current Building Regulations, BSRIA and CIBSE guidelines and/or other appropriate standards, where applicable. Where a building management system (BMS) is specified, the following commissioning procedures must be carried out: 1. Commissioning of air and water systems is carried out when all control devices are installed, wired and functional 2. In addition to air and water flow results, commissioning results include physical measurements of room temperatures, off-coil temperatures and other key parameters as appropriate 3. The BMS/ controls installation should be running in auto with satisfactory internal conditions prior to handover 4. All BMS schematics and graphics (if BMS is present) are fully installed and functional to user interface before handover 5. The occupier or facilities team is fully trained in the operation of the system. An appropriate project team member(s) is appointed to monitor and programme pre-commissioning, commissioning, testing and, where necessary, re-commissioning activities on behalf of the client. The principal contractor accounts for the commissioning and testing programme, responsibilities and criteria within their budget and main programme of works, allowing for the required time to complete all commissioning and testing activities prior to handover.	1	1	0.52	Main contractor	Commitment to carry out a commission in compliance with criteria. Programme of works highlighting commissioning.	As per design stage.	0	0.00		Complete Letter complete letter 'Design Stage Letter - Commissioning Appointment NC' Commissioning schedule Project programme accounting for commissioning Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	
	One credit - Commissioning building services - For buildings with complex building services and systems, a specialist commissioning manager is appointed during the design stage (by either the client or the principal contractor) with responsibility for: a. Undertaking design reviews and giving advice on suitability for ease of commissioning. b. Providing commissioning management input to construction programming and during installation stages. c. Management of commissioning, performance testing and handover/ post-handover stages. Where there are simple building services, this role can be carried out by an appropriate project team member, provided they are not involved in the general installation works for the building services system(s).	1	1	0.52	Main contractor	Commitment to carry out commission in compliance with criteria.	Commissioning certificates and reports.	0	0.00		Complete Letter Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	

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	One credit - Testing and inspecting building fabric - The integrity of the building fabric, including continuity of insulation, avoidance of thermal bridging and air leakage paths is quality assured through completion of post construction testing and inspection. Dependent on building type or construction, this can be demonstrated through the completion of a thermographic survey as well as an air tightness test and inspection. The survey and testing is undertaken by a Suitably Qualified Professional in accordance with the appropriate standard. Any defects identified in the thermographic survey or the air tightness testing reports are rectified prior to building handover and close out. Any remedial work must meet the required performance characteristics for the building/ element.	1	1	0.52	Main contractor	Commitment to carry out commission in compliance with criteria.	Results and certificate from air tightness testing and thermographic survey.	0	0.00		Complete Letter Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	
	One credit - Handover - A Building User Guide (BUG) is developed prior to handover, for distribution to the building occupiers and premises managers. Provision for a Building User Guide and training schedules timed appropriately around handover for non-technical and technical training.	1	1	0.52	Main contractor	Commitment to provide a Building User Guide.	Building User Guide.	0	0.00		Complete Letter Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	
Man 5 Aftercare	One Credit: Aftercare support is/ will be provided to support the building occupiers as a minimum: A meeting, prior to occupation to introduce aftercare team and present the key information. Aftercare support available, including the content of the building user guide (where existing) and training schedule. Present key information on the building including the design intent and how to use the building to ensure it operates as efficiently and effectively as possible. On-site management training, including a walkabout. AND, Introduction and familiarisation with the building systems, their controls and how to operate them in accordance with the design intent and operational demands. Support will be given for a least one month after occupation. Longer term provision will be at least 12 months. Data collection of energy/water consumption for a minimum of 12 month to analyse between actual and predicted performance - adjusting systems/behaviours. Establish operational infrastructure and resources to coordinate the collection and monitoring of energy and water consumption data for a minimum of 12 months.	1	1	0.52	Project Manager	Commitment to provide aftercare support	Programme or schedule of aftercare actions	0	0.00		Complete Letters 'Man 05 - Aftercare and Support' AND 'Man 05 Meeting Minutes Template' Template to be completed post occupancy. If a party is not yet appointed, state TBC	
	One Credit: Over a 12 month period to test the building services, where applicable in low and high occupancy and to interview occupant to ID problems. Recommission system where needed even with simple systems.	1	1	0.52	Main Contractor	Commitment to carry out seasonal commissioning	Programme or schedule of seasonal commissioning	0	0.00		Complete Letters If a party is not yet appointed, state TBC	
	One credit, Conduct a post occupation evaluation one year after occupation, following criteria.	1	1	0.52	Project Manager/Client	Commitment to carry out Post Occupancy Evaluation	As per design stage	0	0.00		Evidence that the POE is in the budget. And a party has been selected complete letters "POE..." Complete Letters and templates. If a party is not yet appointed, state TBC	
Total		21	21	11.00				0	0.00			

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Health and Wellbeing													
Hea 1 Visual Comfort	One Credit - Glare control - designed out in layout or measures. A glare control system maximise daylight levels and use or location of shading.	1	1	0.74	Architect	Plans detailing glare control strategy.	Site Inspection Report.	0	0.00		Shading measures are specified for all relevant building areas regardless of the risk of glare. These include: Building-integrated measures/ Occupant-controlled devices such as opaque Venetian or close weave fabric blinds, (where the openness factor of blinds is 1% or less, and where the fabric light transmittance value is < 0.1 (10%)) / confirm sun blinds meet the above criteria Complete template		
	One Credit - Daylight where average daylight factor of 2% is achieved over at least 80% of the building.	2	0	0.00	Specialist Consultant	Plans and elevations. Daylighting calculations and report.	As Built plans. Site Inspection Report.	0	0.00				
	One Credit - View out - 95% of the floor areas in 95% of spaces is within 8m of a window with an adequate view out and opening is ≥20% of surrounding wall area,.	1	1	0.74	Architect	Plans and elevations. Calculations confirming % of area within 7m of a window with a view out.	As Built plans. Site Inspection Report.	0	0.00		Layouts showing the % window to wall area on elevations and floor plans and distance from wall to window. For office areas View Out layouts showing 95% of the floor areas in 95% of spaces is within 8m of a window with an adequate view out and opening is ≥20% of surrounding wall area,. If >8m then % rises to 25+% Complete template		
	One Credit - Internal and external lighting levels, zoning and control - All fluorescent and compact fluorescent lamps are fitted with high frequency ballasts. Internal lighting in all relevant areas of the building is designed to provide an illuminance (lux) level appropriate to the tasks undertaken, accounting for building user concentration and comfort levels. This can be demonstrated through a lighting design strategy that provides illuminance levels in accordance with the SLL Code for Lighting 2012 and any other relevant industry standard. For areas where computer screens are regularly used, the lighting design complies with CIBSE Lighting Guide 7 sections 2.4.2.13 to 2.15, 2.20 and 6.10 to 6.20 All external lighting located within the construction zone is designed to provide illuminance levels that enable users to perform outdoor visual tasks efficiently and accurately, especially during the night. To demonstrate this, external lighting provided is 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 work places - Part 2: Out door work places. Internal lighting is zoned to allow for occupant control. Zoning and occupant control is in accordance with credit criteria for relevant areas present in the building. In office areas, zones of no more than four workplaces.	1	1	0.74	M&E Consultants/ Main Contractor	Commitment that relevant lighting levels will be achieved.	As Built lighting schedule. Confirmation of any changes to the Design Stage strategy. Site Inspection Report.	0	0.00		Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities. Complete template		
Hea 2 Indoor Air Quality	Pre-requisite: A site specific indoor air quality plan.	-	-		Specialist Consultant	Pre-requisite.	IAQ plan report	-	-		IAQ Plan		
	One Credit - The building has been designed to minimise the concentration and recirculation of pollutants in the building as follows: 1. Provide fresh air into the building in accordance with the criteria of the relevant standard for ventilation. 2. Design ventilation pathways to minimise the build-up of air pollutants in the building, as follows: 3. Where HVAC present, systems must incorporate suitably filtration to minimise external air pollution, as defined in BS EN 16798-3:2017. Filters should be at least SUP2. 4. Areas of building subject to large and unpredictable or variable occupancy have carbon dioxide (CO2) or air quality sensors: 4a. In mechanically ventilated buildings, sensors are linked to mechanical ventilation system and provide demand-controlled ventilation space. 4b. In naturally ventilated buildings or spaces sensors have either the ability to alert the building owner or the ability to adjust the quantity of fresh air, 5. For naturally ventilated or mixed mode buildings, the design demonstrates that the ventilation strategy provides adequate cross flow of air to maintain the required thermal comfort conditions and ventilation rates in accordance with CIBSE AM10	1	1	0.74	M&E Consultant/Main contractor	All credits: One or more of the appropriate evidence types, suggested: copy of indoor air quality plan + relevant section/clauses of the building spec or contract. Test results of VOS testing and/or letter of commitment to do so.	As Built plans. Site Inspection Report.	0	0.00		Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities. Complete letter 'BREEAM_2018v1_Compliance_Proforma_Hea02_01'		

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	Up to two credits: Three out of the five product types meet the emission limits, testing requirements and any additional requirements listed in Table 5.11 from credit criteria. Where wood-based products are not one of these selected product types, all wood-based products used for internal fixtures and fittings must be tested and classified as formaldehyde E1 class as a minimum. For two credits, all of the product types listed need the emissions limits, testing requirements and any additional requirements (table 5.11).	2	1	0.74	Architect/ Main contractor	Confirmation that testing will be carried out.	Results of VOC emission testing	0	0.00		Complete template with products selected based on meeting the European standard, emissions limits and additional requirements Complete template

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	One credit: The formaldehyde concentration level is measured post construction (but pre-occupancy) and is found to be less than or equal to 100ug/m3 averaged over 30 minutes. The total volatile organic compound (TVOC) concentration level is measured post construction (but pre-occupancy) and found to be less than 500ug/m3 over 8 hours, in line with the Building Regulation requirements. Where VOC and formaldehyde levels are found to exceed the limits defined above, the project team confirms the measures that have, or will be taken, in accordance with	1	0	0.00	Main contractor	All credits: One or more of the appropriate evidence types, suggested: copy of indoor air quality plan + relevant section/clauses of the building spec or contract. Formal letter from design team detailing strategy and calculations/results from modelling. Manufactures literature.	Site Inspection Report.	0	0.00		
Hea 4 Thermal Comfort	One Credit - Thermal modelling has been carried out using software in accordance with CIBSE AM11 Building Energy and Environmental Modelling. The software used to carry out the simulation at the detailed design stage provides full dynamic thermal analysis. For smaller and more basic building designs with less complex heating or cooling systems, an alternative less complex means of analysis may be appropriate. The modelling demonstrates that: a. For air conditioned buildings, summer and winter operative temperature ranges in occupied spaces are in accordance with the criteria set out in CIBSE Guide A Environmental design, Table 1.5; or other appropriate industry standard. b. For naturally ventilated/free running buildings: i. Winter operative temperature ranges in occupied spaces are in accordance with the criteria set out in CIBSE Guide A Environmental design, Table 1.5; or other appropriate industry standard. For air conditioned buildings, the PMV (predicted mean vote) and PPD (predicted percent age of dissatisfied) indices based on the above modelling are reported via the BREEAM assessment scoring and reporting tool.	1	1	0.74	Specialist Consultant	Plans. Thermal modelling results.	As Built plans.	0	0.00		A copy of the Thermal Report required, including PMV and PPD values
	One Credit - Adaptability - The thermal modelling demonstrates that the relevant requirements set out in criterion 3 are achieved for a projected climate change environment. Where thermal comfort criteria are not met for the projected climate change environment, the project team demonstrates how the building has been adapted, or designed to be easily adapted in future using passive design solutions.	1	0	0.00	Specialist Consultant	Thermal modelling results.	As Built plans.	0	0.00		
	One Credit - The thermal modelling analysis has informed the temperature control strategy for the building and its users. The strategy for proposed heating/cooling system(s) demonstrates that it has addressed the following: a. Zones within the building and how the building services could efficiently and appropriately heat or cool these areas. b. The degree of occupant control required for these zones, based on discussions with the end user considers: i. User knowledge of building services. ii. Occupancy type, patterns and room functions (and therefore appropriate level of control required). iii. How the user is likely to operate or interact with the system(s). iv. The user expectations (this may differ in the summer and winter) and degree of individual control. c. How the proposed systems will interact with each other (where there is more than one system) and how this may affect the thermal comfort of the building occupants. d. The need or otherwise for an accessible building user actuated manual override for any automatic systems.	1	1	0.74	M&E Consultant/ Main Contractor	Specification and plans confirming the thermal control and zoning strategy.	A built plans. Site inspection report.	0	0.00		The thermal modelling analysis has informed the temperature control strategy for the building and its users. Regarding zoning and degree of occupant control heating layouts and data sheets for specification Complete template

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Hea 5 Acoustic Performance	One credit - Where the building meets the acoustic performance standards and testing requirements for: - Sound insulation - Indoor ambient noise levels - Room acoustics OR a Suitably Qualified Acoustician (SQA) is appointed to define a bespoke set of performance requirements for all function areas in the building.	4	3	2.21	Acoustician	Acoustic report and stating that they are suitably qualified. Relevant section of the building specification or formal letter from the project team regarding commitments.	Result of pre-completion acoustic testing.	0	0.00		Acoustician report confirm BREEAM criteria for Indoor Ambient Noise Evidence of SQA acoustician confirmation Template completed by acoustician	
Hea 6 Security	One Credit – A Suitably Qualified Security Specialist (SQSS) conducts an evidence based Security Needs Assessment (SNA) during or prior to Concept Design. The SQSS develops a set of recommendations or solutions during or prior to Concept Design. These recommendations or solutions aim to ensure that the design of buildings, public and private car parks and public or amenity space are planned, designed and specified to address the issues identified in the preceding SNA. The recommendations or solutions proposed by the SQSS are implemented. Any deviations from the recommendations or solutions will need to be justified, documented and agreed in advance with a suitably qualified security specialist.	1	0	0.00	SQSS/Architect/Main contractor	Correspondence or feedback from the CPDA/ ALO confirming the scope of their involvement, stage at which their advice was sought, summary of their recommendations. Design drawings highlighting measures compliant with recommendations.	Site Inspection Report.	0	0.00	Early Stage Credit		
Hea 7 Safe and Healthy Surroundings	One credit: Where external site areas form part of the assessed development the following apply: 1. Dedicated and safe cycle paths are provided from the site entrance to any cycle storage, and connect to offsite cycle paths where applicable. 2. Dedicated and safe footpaths are provided on and around the site providing suitable links for the following: 2.a The site entrance to the building entrance 2.b Car parks (where present) to the building entrance 2.c The building to outdoor space 2.d Connecting to off-site paths where applicable. 3. Pedestrian drop-off areas are designed off, or adjoining to, the access road and should provide direct access to other footpaths. Where vehicle delivery access and drop-off areas form part of the assessed	1	1	0.74	Architect		As built plans. Site inspection report.	0	0.00		Provide evidence of safe access for pedestrians and cyclists Marked out safe cycle and footpaths on drawings to shelter/building entrance/exit in car park (required to be painted on) Complete template	
	One credit: There is an outside space providing building users with an external amenity area.	1	1	0.74	Architect		As built plans. Site inspection report.	0	0.00		Complete template Layouts showing the outside space on site.	
Total		19	12	8.84				0	0.00			

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Energy												
Ene 1 Reduction of energy use and carbon emissions	Up to Twelve Credits where evidence provided demonstrates an improvement in the energy efficiency of the building's fabric and services and therefore achieves lower building operational related CO2 emissions.	13	3	2.18	Specialist Consultant	BRUKL output document confirming an Energy Performance Ratio of at least 0.15 is achieved.	As Built BRUKL Output Document confirming Energy Performance Ratio is achieved.	0	0.00		Design stage Bruks and inp BRUKI file Modeller Qualifications Complete template	
Ene 2 Energy Monitoring	One Credit - 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 1,000m2 are metered using an appropriate energy monitoring and management system. The systems in smaller buildings are metered either with an energy monitoring and management system or with separate accessible energy sub-meters with pulsed or other open protocol communication outputs, to enable future connection to an energy monitoring and management system. The end energy consuming uses are identifiable to the building users, for example through labelling or data out puts.	1	1	0.73	M&E Consultant/ Main Contractor	Plans/ schematic. Specification.	As Built documentation. Site Inspection Report.	0	0.00		Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities. Metering layouts - sub meters for each category of systems Specification of pulsed meters Electrical metering schematic Mechanical metering schematic BMS specification if >1000m2 complete document - 'Ene 02 Evidence Submission Note'	
Ene 3 External Lighting	One Credit - The building has been design to operate without external lighting OR All external light fittings for the construction site are not less than 70 Lumens / circuit Watt. External light fittings are controlled through a time switch, or daylight sensor, to prevent operation during daylight hours and presence detection in area of intermittent pedestrian traffic.	1	1	0.73	M&E Consultant/ Main Contractor	One or more of the appropriate evidence types, suggested: Specification confirming lux levels. Design drawings.	As Built plans. Manufacturers literature. As Built lighting schedule. Site Inspection Report.	0	0.00		Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities. Confirm Presence detection in areas of intermittent pedestrian traffic with lighting layout drawing External lighting schedule, specification, calculations, and datasheets Automatic control to prevent operation during daylight hours	
Ene 4 Low carbon design	One Credit - Hsa 4 has been achieved. At RIBA 2, analysis to influence passive design solutions to reduce energy demand have been complete. Implement passive design measures to reduce the total heating, cooling, mechanical ventilation, lighting and energy load and energy consumption in line with the passive design analysis findings. Quantify the reduced total energy demand and carbon dioxide (CO2-eq) emissions resulting from the passive design measures.	1	0	0.00	Specialist Consultant	Passive design analysis report/evidence.	As Built plans confirming passive design strategy. Site Inspection Report.	0	0.00			
	One Credit - The free cooling analysis in the passive design analysis is carried under criterion 2 of the credit criteria. Identify opportunities for the implementation of free cooling solutions. The building is naturally ventilated or uses any combination of the free cooling strategies: 1. Night time cooling (which could include the use of a high exposed thermal mass) 2. Ground coupled air cooling 3. Displacement ventilation (not linked to any active cooling system) 4. Ground water cooling 5. Surface water cooling 6. Evaporative cooling, direct or indirect 7. Desiccant dehumidification and evaporative cooling, using waste heat 8. Absorption cooling, using waste heat 9. The building does not require any significant form of active cooling or mechanical ventilation.	1	0	0.00	Specialist Consultant	Feasibility Study confirming free cooling analysis.	As Built plans confirming free cooling strategy. Site Inspection Report.	0	0.00			
	One Credit where a Feasibility Study has been carried out to establish the most appropriate low or zero carbon technology for the site. As a minimum the study covers: *Energy generated from LZC energy source per year; *Life cycle cost of the potential system, accounting for payback; *Local planning criteria, including land use and noise; *Feasibility of exporting heat/ electricity from the system; *Any available grants; *All technologies appropriate to the site and energy demand of the development; *Reasons for excluding other technologies; *Where appropriate, connecting the building to an existing local community CHP system or specifying a site CHP system. *Energy storage	1	1	0.73	Specialist Consultant	A copy of the Feasibility Study. Report/ calculations/ output from approved software of the carbon reductions possible. Results from a dynamic simulation model demonstrating the feasibility of the free cooling strategy and meeting the first credit for Hsa 04.	Output from software which confirms meaningful reduction with As Built information. Site Inspection Report.	0	0.00		Author Qualifications Specification, calculations, drawings and datasheets for LZC fittings LZC study confirm % CO2 reduction from ASHP and PV	

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10429	23 -10429 - 65 Northcourt Avenue	BREEAM New Construction 2018 - Design Stage - Ver 1 19/07/23 (Fully Fitted)										
Credit	Criteria	Available Credits	Credits likely /	% per credit	Responsibility	Design Stage Evidence Requirement	Post Construction Stage Evidence Required	Credits awarded	% Achieved	Credit Stage	Evidence needed	
Ene 6 Energy Efficient transportation systems	One Credit - Where lifts, escalators and/or moving walks (transportation types) are specified: a. Analyse the transportation demand and usage patterns for the building to determine the optimum number and size of lifts, escalators and/or moving walks. b. Calculate the energy consumption in accordance with BS EN ISO 25745 Energy performance of lifts, escalators and moving walks, Part 2: Energy calculation and classification for lifts and/or Part 3: Energy calculation and classification for escalators and moving walks, for one of the following: i. At least two options for each transportation type (eg for lifts, hydraulic, traction or machine room-less); OR ii. At least two options considering different system arrangements and control strategies; OR ic. The use of regenerative drives should be considered. d. The transportation system with the lowest energy consumption is specified.	1	1	0.73	Lift Consultant	Transportation analysis report/specifications	As per design stage	0	0.00		Lift transportation demand Analysis - Manufacturer letter showing how lift complies with Ene 06 credits	
	One Credit - Achieve previous criterion 1. For each lift, the following three energy efficient features are specified: a. The lifts operate in a standby condition during off-peak periods b. The lift car lighting and display lighting provides an average lamp efficacy, (across all fittings in the car) of > 70 lamp lumens/circuit Watt. c. The lift uses a drive controller capable of variable speed, variable-voltage, and variable-frequency (VVVF) control of the drive motor. Where the use of regenerative drives is demonstrated to save energy, they are specified.	1	1	0.73	Main Contractor	Transportation analysis report/specifications	As per design stage	0	0.00		Lift Data Sheet showing compliance	
Ene 8 Energy Efficient Equipment	One Credit - Identify the building's unregulated energy consuming loads and estimate their contribution to the total annual unregulated energy consumption of the building, assuming a typical/standard specification. Identify the systems and/or processes that use a significant proportion of the total annual unregulated energy consumption of the development and its operation. Demonstrate a meaningful reduction in the total annual unregulated energy consumption of the building.	2	2	1.45	Main Contractor /Architect	Specification. Manufacturer's literature.	Site Inspection Report.	0	0.00		Complete template and provide data sheets/EU labelling for selected fittings schedule of fittings	
Total		22	10	7.27				0	0.00			

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Credit	Criteria	Available Credits	Credits likely /	% per credit	Responsibility	Design Stage Evidence Requirement	Post Construction Stage Evidence Required	Credits awarded	% Achieved	Credit Stage	Evidence needed	
Transport												
Tra 1 Transport assessment and travel plan	Up to two Credits During the feasibility and design stages, develop a travel plan based on a site-specific travel assessment or statement. The site-specific travel assessment or statement covers as a minimum: a Existing travel patterns and opinions of existing building or site users towards cycling and walking, identifying constraints and opportunities, if relevant b Travel patterns and transport impact of future building users c Current local environment for walkers and cyclists (accounting for visitors who may be accompanied by young children) d Reporting of the number and type of existing accessible amenities, within 500m of the site e Disabled access (accounting for varying levels of disability and visual impairment) f Calculation of the existing public transport Accessibility Index (AI) g Current facilities for cyclists The travel plan includes proposals to increase or improve sustainable modes of transport and movement of people and goods during the building's operation and use If the occupier is known, involve them in the development of the travel plan. Demonstrate that the travel plan will be implemented post construction and be supported by the building's management in operation.	2	2	1.67	Transport Consultant	Scale map highlighting the location of the development and all public transport nodes in proximity of the building. Timetables for the services at each transport node. The calculated Accessibility Index. Tra 01 calculator.	As per design stage.	0	0.00	Early Stage Credit	Travel Plan & Transport Assessment Author to complete travel plan confirmation statement of scope.	
Tra 2 Sustainable transport measures	Up to 10 credits Where Tra 01 is achieved and sustainable transport measures detailed in credit criteria are achieved awarded according to the Accessible Index (AI) of the project. Sustainable Transport Measures include: -Is the existing Accessibility Index for the site >8?	1	0	0.00	All design team	Marked up map with amenities and route on a scaled map. OR a letter of commitment that these will be installed within the development with a timescale of the development.	Site Inspection Report.	0	0.00			
	Will the development itself demonstrate in an increase in the site's Accessibility Index? Dedicated bus service	1	0	0.00	Project Manager/ BREEAM Assessor	Increase of amenities evidence	Site Inspection Report.	0	0.00			
	Will a public transport information system be provided in a public place?	1	0	0.00	Project Manager	AI calculation evidence	Site Inspection Report.	0	0.00			
	Will electric car charging stations be provided for at least 10% of the total car parking?	1	1	0.83	M&E Consultant/ Architect	Layouts and specifications	Site Inspection Report.	0	0.00		Layouts showing the number of charging stations (10% of parking spaces) EV charger data sheets	
	Will a car sharing scheme be developed?	1	1	0.83	Architect	Travel Plan to confirm measures	Site Inspection Report.	0	0.00		Layouts showing the number of car sharing spaces (5% of parking spaces)	
	Will consultation with the Local Authority regarding the local cycle network and pedestrian routes for the site, with improvement proposition agreed with the LA being implemented?	1	0	0.00	Client/Project Manager	Evidence of consultation with LA	Site Inspection Report.	0	0.00			
	Will compliant cycle storage spaces be provided?	1	1	0.83	Architect	Layouts and specifications	Site Inspection Report.	0	0.00		Spec/datasheet for cycle racks/stands Detail/spec of lighting at cycle stores (MEP)	
	Will compliant cyclist facilities be provided, in the form of either showers, changing facilities, lockers or drying spaces?	1	1	0.83	Architect	Layouts and specifications	Site Inspection Report.	0	0.00		Drawing indicating the intended location for the potential locker/changing rooms/drying room/showers (2 of 4) location of capped out services where potentially fitted	
	Will suitable existing amenities be available to building users?	1	1	0.83	BREEAM Assessor	Amenities report	Site Inspection Report.	0	0.00		Assessor to Review local environment Confirm if there are any other building types included in the site project	
	Will the development provide additional suitable amenities for building users?	1	0	0.00	Project Manager/ BREEAM Assessor	Amenities report	Site Inspection Report.	0	0.00			
Total		12	7	5.83				0	0.00			

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Water												
Wat 1 Water Consumption	Up to Five Credits - 3 credits achieved with a 40% reduction in potable water consumption from a notional baseline. The efficiency of the following 'domestic scale' water-consuming components must be included in the assessment (where specified): a. WCs b. Urinals c. Taps (wash hand basins and where specified kitchen taps and waste disposal unit) d. Showers e. Baths f. Dishwashers (domestic and commercial sized) g. Washing machines (domestic and commercial or industrial sized).	5	3	2.33	M&E Consultant/ Main Contractor/Architect	Specification confirming model, manufacturer and flow rate of all water fittings. Plans confirming location of sanitary fittings.	Manufacturers literature. Site Inspection Report.	0	0.00		Schedule of public health fittings, WHB/WC/showers etc when available - provide all data sheets based on existing schedule comments Public Health Layouts Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	
Wat 2 Water Monitoring	One Credit - The specification of a water meter on the mains water supply to each building; this includes instances where water is supplied via a borehole or other private source. Water-consuming plant or building areas, consuming 10% or more of the building's total water demand, are either fitted with sub meters or have water monitoring equipment integral to the plant or area (see Compliance notes). Each meter (main and sub) has a pulsed output to enable connection to a Building Management System (BMS) for the monitoring of water consumption. If the site on which the building is located has an existing BMS, managed by the same occupier/owner (as the new building), the pulsed water meter(s) for the new building must be connected to the existing BMS.	1	1	0.78	M&E Consultant/ Main Contractor/Architect	A copy of the specification clause confirming the specification and type of water meter. Design plans showing location of water meter.	Manufacturers literature. Site Inspection Report.	0	0.00		Water meter data sheet with pulsed output capability Layout showing water meter location Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	
Wat 3 Water Leak Detection	One Credit where a leak detection system which is capable of detecting a major water leak on the mains water supply within the building and between the building and the utilities water meter. The leak detection system must be: a. A permanent automated water leak detection system that alerts the building occupants to the leak OR an inbuilt automated diagnostic procedure for detecting leaks is installed. b. Activated when the flow of water passing through the water meter/data logger is at a flow rate above a pre-set maximum for a pre-set period of time. c. Able to identify different flow and therefore leakage rates. d. Programmable to suit the owner/occupiers' water consumption criteria. e. Where applicable, designed to avoid false alarms caused by normal operation of large water-consuming plant such as chillers.	1	1	0.78	M&E Consultant/ Main Contractor/Architect	Relevant sections of the specification. Design drawings.	Manufacturers literature. Site Inspection Report.	0	0.00		Data sheet for leak detection unit Layout showing leak detection system location Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	
	One Credit - Flow control devices that regulate the supply of water to each WC area/ facility according to demand are installed (and therefore minimise water leaks and wastage from sanitary fittings).	1	0	0.00	M&E Consultant/ Main Contractor/Architect	Relevant sections of the specification. Design drawings.	Manufacturers literature. Site Inspection Report.	0	0.00			
Wat 4 Water efficient equipment	One credit. Identify all water demands outside Wat 01 that could be realistically mitigated or reduced. Identify systems or processes to reduce the relevant water demand (criterion above), and establish, through either good practice design or specification, a demonstrable reduction in the total water demand of the building.	1	1	0.78	M&E Consultant/ Main Contractor/Architect	M&E Consultant/ Main Contractor/Architect	Manufacturers literature. Site Inspection Report.	0	0.00		Confirm in email there is no mechanical irrigation system and that all external landscaping is watered only via precipitation. complete letter - 'BREEAM_2018_Wat 4' Landscaping layout showing bib taps Data sheet for any irrigation system or other external water consuming fittings. Requires consumption reduction features	
Total		9	6	4.67				0	0.00			

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Materials												
Mat 1 Environmental Impacts from Construction Products - Building Life Cycle Assessment (LCA)	Up to Seven Credits - To reduce the burden on the environment from construction products by recognising and encouraging measures to optimise construction product consumption efficiency and the selection of products with a low environmental impact (including embodied carbon), over the life cycle of the building.	7	1	1.07	Architect / Specialist Consultant	The Mat 01/02 Results Submission Tool. The options appraisal document. Evidence that the LCA options appraisal summary document has been received by the design team. Evidence how the LCA design options have informed the design decision-making process. The LCA options appraisal summary document includes substructure and hard landscaping according to the criteria.	As per design stage	0	0.00	Early Stage Credit	Complete excel documents as per the guidance documents provided.	
Mat 2 Environmental Impacts from Construction Products - Environmental Product Declarations (EPD)	One Credit - To encourage availability of robust and comparable data on the impacts of construction products through the provision of EPD	1	0	0.00	Architect / Main Contractor	Material Specification confirming EPD. The Mat 01/02 Results submission tool. Copies of the EPD certificates	As per the design stage	0	0.00			
Mat 3 Responsible Sourcing of construction products	Pre-requisite: All timber and timber-based products used on the project is Legally harvested and traded timber. One Credit - The principal contractor sources materials for the project in accordance with a documented sustainable procurement plan.	1	1	1.07	Architect	Sustainable Procurement Plan	As per design stage.	0	0.00	Early Stage Credit	Pre-requisite regarding timber sourcing to be achieved. Sign and back date SPP to stage 2 design stage. Commit to local sourcing of materials	
	Three Credits - are available where evidence provided demonstrates that over 20% (to achieve 2 credits) of the assessed materials in the following building elements are responsibly sourced: 1. Superstructure 2. Internal finishes 3. Substructure and hard landscaping	3	1	1.07	Architect	NOTE: The legally harvested timber must be met in order to achieve this credit. Design plan and/or specification confirming the location of elements, materials specified and details of materials specified. A copy of the output from BREEAM Mat 03 Calculator. Copies of all relevant materials environmental certification including the chain of custody.	Confirmation that there have been no changes since design stage. Site Inspection Report.	0	0.00		Complete proforma. Examples provided provide certificates from proforma	
Mat 5 Designing for Durability and Resilience	One Credit - where protection is given to vulnerable parts of the building such as areas exposed to high pedestrian traffic, vehicular and trolley movements. *Protection from the effects of high pedestrian traffic in main entrances, public areas and thoroughfares. *Protection against any internal vehicular/trolley movement within 1m of the internal building fabric in storage, delivery, corridor and kitchen areas. *Protection against any potential vehicular collisions when vehicular parking and manoeuvring occurs within 1m of external building facade for all car parks and 2m for delivery areas. Protecting the exposed parts of the building from materials degradation due to environmental factors (see criteria for further explanations and suggested methods).	1	1	1.07	Architect	Design drawings marked up to illustrate vulnerable areas/parts of the building. Design drawing and/or specification confirming the durability measures specified. Assessor's site inspection report.	Site Inspection Report.	0	0.00		Complete proforma - specifically Criteria 3 & 4 Markup on drawing to demonstrate the measures in the templates (arrows + comment sufficient) take note of the roof access criteria. Mechanical equipment or specialist access does not pass unless '6622_11361-Mat05-Roof-access-statement' regarding security risks	
Mat 6 Material Efficiency	One Credit - To recognise and encourage measures to optimise material efficiency in order to minimise environmental impact of material use and waste. Opportunities have been 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 is carried out by the design/construction team in consultation with the relevant parties at each of the following RIBA stages: a.Preparation and Brief b.Concept Design c.Developed Design d.Technical Design e.Construction.	1	0	0.00	All design team	One or more of the appropriate evidence types, suggested: Reports (at Preparation and Brief stage) outlining the activity relating to material efficiency (ideas discussed, analysis and decisions taken), Drawings or building integrated model (BIM), calculations showing reduction of material use through design (Concept Design/Developed Design stages), Meeting notes, construction program, responsibilities schedule (indicating parties consulted).	As per design stage.	0	0.00			
Total		14	4	4.29				0	0.00			

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Credit	Criteria	Available Credits	Credits likely /	% per credit	Responsibility	Design Stage Evidence Requirement	Post Construction Stage Evidence Required	Credits awarded	% Achieved	Credit Stage	Evidence needed	
Waste												
Wst 1 Construction Waste Management	Up to Three Credits - are available where evidence provided (Resource Management Plan - RMP) demonstrates that the amount of non-hazardous construction waste (m3/100m2 or tonnes/100m2) generated on site by the development and dedicated off-site manufacture or fabrication (including demolition and excavation waste) are recorded and construction waste is the same as or better than good or best practice levels below: 1 credit = 13.3m³/100m² Or 11.1 tonnes/100m² 2 credit = 7.5m³/100m² Or 6.5 tonnes/100m² 3 credit = 3.4m³/100m² Or 3.2 tonnes/100m²	3	1	0.67	Main contractor	A copy of the compliant Site Waste Management Plan/RMP containing the appropriate guidance from any of the following: DEFRA, BRE or WRAP. Demolition audit (if appropriate to site)	Copy of the Site Waste Management Plan. Delivery receipts.	0	0.00		Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	
	One Credit The following percentages of non-hazardous construction and demolition waste (where applicable) generated have been diverted from landfill: *Refurbishment - 70% by volume or 80% by tonnage *Demolition - 80% by volume or 90% by tonnage	1	1	0.67	Main contractor		Copy of the Site Waste Management Plan. Delivery receipts.	0	0.00		Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities. Site Waste Management Plan (or similar) - which reports waste in m3 or tonnes per 100m2 (GIFA) - Use template as demonstration of what will be used	
Wst 2 Use of recycled and sustainably sourced aggregates	One Credit - where the total amount of recycled and/or secondary aggregate specified is greater than % (by weight or volume) in table 10.4 -of the total high-grade aggregate specified for the development (3.5-6 sustainable aggregates points).	1	1	0.67	Project Manager / Demolition Contractor	Relevant sections/clauses of the building specification or contract AND Project team calculations confirming the source/used of recycled/secondary aggregates.	Delivery receipts. As Built calculations.	0	0.00		Complete templates	
Wst 3 Operational Waste	One Credit - where there is a dedicated space to cater for segregation and storage of operational waste volumes generated by the building. The space should be appropriately sized, clearly labelled and accessible to building users. Provision of the following where applicable: *Compactor or baler in a dedicated waste management area; *Vessel for composting suitable organic waste or adequate space for storing segregated food waste; *Where organic waste is to be stored/ composted, a water outlet should be provided within the facility for cleaning and hygiene purposes.	1	1	0.67	Architect	Relevant sections of the building specification. Design drawings detailing the m2 area location. Letter confirming likely operational waste streams.	Site Inspection Report.	0	0.00		Layouts showing the waste area size. As per the m2 required from the excel provided Show on the drawings the potential area that a baler could be located OR confirm in an statement why it is not required.	
Wst 5 Adaptation to Climate Change	One Credit - Conduct a climate change adaptation strategy appraisal for structural and fabric resilience by the end of Concept Design (RIBA Stage 2 or equivalent), in accordance with the following approach: Carry out a systematic (structural and fabric resilience specific) risk assessment to identify and evaluate the impact on the building over its projected life cycle from expected extreme weather conditions arising from climate change and, where feasible, mitigate against these impacts. The assessment should cover the following stages: i. Hazard identification ii. Hazard assessment iii. Risk estimation iv. Risk evaluation v. Risk management.	1	1	0.67	Architect	Copy of the risk assessment and any design drawings to show the implications of impacts considered.	As per design stage.	0	0.00	Early Stage Credit	Complete proforma	
Wst 6 Design for disassembly and adaptability	One Credit - Conduct a study to explore the ease to disassembly and the functional adaptation potential of different design scenarios by the end of concept design. One Credit - Achieve criteria 1 and 2 and provide an update on Technical design, how recommendations or solutions proposed by concept design have been implemented and any changes to the recommendations and solutions during the development of the Technical Design.	2	2	1.33	Architect	One or more of the appropriate evidence types PLUS Functional adaptation strategy and implementation plan report.	Site Inspection Report.	0	0.00	Early Stage Credit	Complete proforma	
Total		9	7	4.67				0	0.00			

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Land Use and Ecology													
LE 1 Site Selection	One Credit - where 75% of the proposed development's footprint is on an area of land which has previously been developed.	1	0	0.00	Architect	Design drawings showing: *Type and duration of previous land use; *Area (m2) of previous land use; *Location and footprint (m2) of proposed development and temporary works.	As Built plans. Site Inspection Report.	0	0.00				
	One Credit - where the site is deemed to be significantly contaminated as confirmed by a contaminated land specialist's site investigation.	1	0	0.00	Specialist Consultant	Land contamination report. Details of remediation works undertaken. PLUS A copy of the remediation strategy and implementation plan.	As per design stage.	0	0.00				
LE 2 Identifying and Understanding the Risks and Opportunities for the Project	One Credit where the land within the construction zone can be defined as of 'low ecological value' by a Suitably Qualified Ecologist.	1	1	1.00	SQE/Main contractor	Suitably Qualified Ecologist's report confirming the low value which should include all points from BREEAM checklist AND/OR a completed BREEAM checklist	As per design stage.	0	0.00	Early Stage Credit	Ecology Report and template completed		
	One Credit - All existing features of ecological value within the assessment zone are adequately protected from damage during clearance, site preparation and construction activities in line with BS42020: 2013. In all cases, the principal contractor is required to construct ecological protection recommended by the Suitably Qualified Ecologist (SQE), prior to any preliminary site construction or preparation works of the site or erection of temporary site facilities.	1	1	1.00	SQE/Main contractor	Confirmation that ecological protection will be installed.	Site Inspection Report.	0	0.00	Early Stage Credit	Ecology Report and template completed		
LE 3 Managing Negative Impacts on Ecology	Pre-requisite, LE02 has been achieved. One credit, roles and responsibilities for managing negative impacts on the ecology are clearly defined and allocated to support successful delivery of project outcomes at an early enough stage to influence the preparation and brief or Concept Design.	1	1	1.00	SQE/Main contractor	Design drawings of existing and proposed site plans in areas of locations types specified m2. Copy of output from ecology calculator and evidence of data used to complete the tool (if applicable). Copy of ecologists report stating if there is a negative change to the site.	Site Inspection Report.	0	0.00	Early Stage Credit	Ecology Report		
	Up to two credits, criteria 2 -4 have been achieved. Negative impacts from site preparation and construction works have been managed according to the hierarchy and, either: -no net loss of ecological value has occurred (2 credits) -The loss of ecological value has been minimised (1 credit)	2	0	0.00	SQE			0	0.00	Early Stage Credit			
LE 4 Change and Enhancement of Ecological Value	One Credit - where an Ecologist is appointed to report on enhancing and protecting the ecology of the site. The general recommendations of the ecologist are implemented. Up to three credits - where the Ecologists recommendations result in calculation in ecological value following: 1 credit, minimising loss of ecological value (75-94%) 2 credits, no net loss of ecological value, percentage score (95-104%) 3 credits, Net gain of ecological valued, percentage score (105-109%)	4	3	3.00	SQE	All Credits - Ecologists report which should include guidance/recommendations for improving the site. Design drawings to show the recommendations have been included. Letter of commitment that this will be undertaken within 18 month of completion (if not already completed at post construction stage) Copy of output from ecology calculator and evidence of data used to complete the tool (if applicable).	Site Inspection Report.	0	0.00	Early Stage Credit	Ecology Report		
LE 5 Long Term Ecology Management and Maintenance	Pre-requisite, Criteria 2-3 in LE03 achieved. One credit. The project team liaise and collaborate with representative stakeholders, taking into consideration data collated and shared, on solutions and measures implemented to: 3.a Monitor and review the effectiveness with which the plans for LE 03 & LE 04 are implemented 3.b develop and review management and maintenance solutions, actions or measures. One credit, Landscape and ecology management plan, or equivalent, is developed in accordance with BS 42020:2013 Section 11.1(210) covering as a minimum the first five years after project completion and includes: -Actions and responsibilities, prior to handover, to give to relevant individuals -The ecological value and condition of the site over the development life. -Identification of opportunities for ongoing alignment with activities external to the development project and which supports the aims of BREEAM's Strategic Ecology Framework -Identification and guidance to trigger appropriate remedial actions to address previously unforeseen impacts -Clearly defined and allocated roles and responsibilities.	2	2	2.00	SQE	Confirmation that BREEAM criteria will be achieved.	The ecologist confirms that all UK and EU relevant legislation has been complied with along with how additional measures can be achieved or are not applicable AND A copy of the site's landscape or habitat management plan OR relevant sections/clauses of the building specifications or contract.	0	0.00	Early Stage Credit	Ecology Report & landscape or habitat management plan		
		13	8	8.00				0	0.00				

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Pollution												
Pol 1 Impact of Refrigerants	Three Credits - where the building does not require the use of refrigerants. OR Pre-requisite - All systems (with electric compressors) must comply with the requirements of BS EN 378:2008 (parts 2 and 3) and where refrigeration systems containing ammonia are installed, the Institute of Refrigeration Ammonia Refrigeration Systems Code of Practice. Two Credits - Where the systems using refrigerants have Direct Effect Life Cycle CO2e/kW cooling/heating capacity. To calculate the DELC CO2e2 equivalent emissions. OR Where air -conditioning or refrigeration systems are installed the refrigerants used have a Global Warming Potential (GWP) ≤ 10. OR One Credit - Where the systems using refrigerants have Direct Effect Life Cycle CO2 equivalent emissions of <1000 kgCO2e/ kW cooling/ heating capacity.	3	3	2.00	M&E Consultant/ Main Contractor	Specification and plans confirming how BREEAM criteria has been achieved.	As Built documentation. Site Inspection Report.	0	0.00		Confirm there are no refrigerant containing systems installed in the assessed building	
Pol 2 Local air quality	All heating and hot water is supplied by non-combustion systems or alternatively emissions from all installed combustion plant that provide space heating and domestic hot water do not exceed levels (for gas boilers): -27 mg/KWh (1 credit) -24 mg/KWh (2 credits)	2	2	1.33	M&E Consultant/ Main Contractor	Specification.	Technical data sheets of installed products. Site Inspection Report.	0	0.00		Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	
Pol 3 Flood and surface water management	Pre-requisite - an appropriate Consultant is appointed to carry out/confirm compliance with the following criteria. Two Credits - where the building is situated in a low flood zone not at risk from flooding. (Only One Credit is available where the development is situated in a flood zone where the probability of flooding is likely (medium to high)). This is to be confirmed within a site specific Flood Risk Assessment which confirms the probability of flooding from all sources.	2	2	1.33	Structural engineer /Drainage Consultant	Flood Risk Assessment.	Flood Risk Assessment. Confirmation that there have been no changes required to the Site Inspection Report.	0	0.00	Early Stage Credit	Flood Risk Assessment incomplete - FRA to cover all types of flooding	
	Pre-requisite, surface water run-off rate must be bespoke and account for specific requirements and natural or man-made environment of a surrounding One credit, for brownfield sites, the drainage measures are specified so that the peak rate of run-off from the site to the watercourses shows a 30% improvement for the developed site compared with the pre-developed site at the 1-year and 100-year return period events. For greenfield sites, drainage measures are specified so that the peak rate of run-off from the site will not greater for the developed site than it was for the pre-development site. One Credit - where the property will not flood in the event of a local drainage system failure. The post development run-off volume should be no greater for the developed site than it was for the pre-developed site. Any additional predicted volumes for the 100 year 6 hour event must be prevent from leaving the site through SUDs.	2	0	0.00	Structural engineer /Drainage Consultant	Drainage calculations and plans.	As Built drainage plans.	0	0.00	Early Stage Credit	FRA Author qualifications	
	One Credit - where the property will not flood in the event of a local drainage system failure. The post development run-off volume should be no greater for the developed site than it was for the pre-developed site. Any additional predicted volumes for the 100 year 6 hour event must be prevent from leaving the site through SUDs.	2	0	0.00	Structural engineer /Drainage Consultant	Drainage calculations and plans.	As Built drainage plans.	0	0.00	Early Stage Credit	FRA author contact details	
	One Credit - where the property will not flood in the event of a local drainage system failure. The post development run-off volume should be no greater for the developed site than it was for the pre-developed site. Any additional predicted volumes for the 100 year 6 hour event must be prevent from leaving the site through SUDs.	2	0	0.00	Structural engineer /Drainage Consultant	Drainage calculations and plans.	As Built drainage plans.	0	0.00	Early Stage Credit	FRA author to complete FRA template - Pol 3 - GN38-Relating-drainage-reports	
	One Credit - where the property will not flood in the event of a local drainage system failure. The post development run-off volume should be no greater for the developed site than it was for the pre-developed site. Any additional predicted volumes for the 100 year 6 hour event must be prevent from leaving the site through SUDs.	2	0	0.00	Structural engineer /Drainage Consultant	Drainage calculations and plans.	As Built drainage plans.	0	0.00	Early Stage Credit	FRA to complete letters - 'POL03 Flood resilience', 'POL03 Surface water run off rate', 'POL03 Surface water run off volume'	
	Pre-requisite, surface water run-off rate must be bespoke and account for specific requirements and natural or man-made environment of a surrounding One credit, for brownfield sites, the drainage measures are specified so that the peak rate of run-off from the site to the watercourses shows a 30% improvement for the developed site compared with the pre-developed site at the 1-year and 100-year return period events. For greenfield sites, drainage measures are specified so that the peak rate of run-off from the site will not greater for the developed site than it was for the pre-development site. One Credit - where the property will not flood in the event of a local drainage system failure. The post development run-off volume should be no greater for the developed site than it was for the pre-developed site. Any additional predicted volumes for the 100 year 6 hour event must be prevent from leaving the site through SUDs.	2	0	0.00	Structural engineer /Drainage Consultant	Drainage calculations and plans.	As Built drainage plans.	0	0.00	Early Stage Credit	FRA to complete letters - 'POL03 Flood resilience', 'POL03 Surface water run off rate', 'POL03 Surface water run off volume'	
	One Credit - where the property will not flood in the event of a local drainage system failure. The post development run-off volume should be no greater for the developed site than it was for the pre-developed site. Any additional predicted volumes for the 100 year 6 hour event must be prevent from leaving the site through SUDs.	2	0	0.00	Structural engineer /Drainage Consultant	Drainage calculations and plans.	As Built drainage plans.	0	0.00	Early Stage Credit	FRA to complete letters - 'POL03 Flood resilience', 'POL03 Surface water run off rate', 'POL03 Surface water run off volume'	
	One Credit - where the property will not flood in the event of a local drainage system failure. The post development run-off volume should be no greater for the developed site than it was for the pre-developed site. Any additional predicted volumes for the 100 year 6 hour event must be prevent from leaving the site through SUDs.	2	0	0.00	Structural engineer /Drainage Consultant	Drainage calculations and plans.	As Built drainage plans.	0	0.00	Early Stage Credit	FRA to complete letters - 'POL03 Flood resilience', 'POL03 Surface water run off rate', 'POL03 Surface water run off volume'	
Pol 04 Reduction of Night time light pollution	One Credit - External lighting has been eliminated through effective design OR The external lighting strategy has been designed in compliance with Table 2 (and its accompanying notes) of the ILE Guidance notes for the reduction of obtrusive light, 2005. All external lighting (except for safety and security lighting) can be automatically switched off between 2300hrs and 0700hrs. This can be achieved by providing a timer for all external lighting set to the appropriate hours. If safety or security lighting is provided and will be used between 2300hrs and 0700hrs, this part of the lighting system complies with the lower levels of lighting recommended during these hours in Table 1 of the ILE's Guidance notes, for example by using an automatic switch to reduce the lighting levels at 2300 or earlier. Illuminated advertisements, where specified, must be designed in compliance with ILE Tech-nicely Report 5 – The Brightness of Illuminated Advertisements.	1	1	0.67	M&E Consultant/ Main Contractor	The M&E engineer or lighting design must indicate examples where and how elimination has been achieved. Drawings. Specification or external lighting calculations.	Confirmation that the design specification has been installed. Site Inspection Report.	0	0.00		Email confirming that the BREEAM specifications for Mech/Elec/Main Contractor/Demolition formed part of the main contractors responsibilities.	
	One Credit - External lighting has been eliminated through effective design OR The external lighting strategy has been designed in compliance with Table 2 (and its accompanying notes) of the ILE Guidance notes for the reduction of obtrusive light, 2005. All external lighting (except for safety and security lighting) can be automatically switched off between 2300hrs and 0700hrs. This can be achieved by providing a timer for all external lighting set to the appropriate hours. If safety or security lighting is provided and will be used between 2300hrs and 0700hrs, this part of the lighting system complies with the lower levels of lighting recommended during these hours in Table 1 of the ILE's Guidance notes, for example by using an automatic switch to reduce the lighting levels at 2300 or earlier. Illuminated advertisements, where specified, must be designed in compliance with ILE Tech-nicely Report 5 – The Brightness of Illuminated Advertisements.	1	1	0.67	M&E Consultant/ Main Contractor	The M&E engineer or lighting design must indicate examples where and how elimination has been achieved. Drawings. Specification or external lighting calculations.	Confirmation that the design specification has been installed. Site Inspection Report.	0	0.00		Electrical specification/ drawings	
	One Credit - External lighting has been eliminated through effective design OR The external lighting strategy has been designed in compliance with Table 2 (and its accompanying notes) of the ILE Guidance notes for the reduction of obtrusive light, 2005. All external lighting (except for safety and security lighting) can be automatically switched off between 2300hrs and 0700hrs. This can be achieved by providing a timer for all external lighting set to the appropriate hours. If safety or security lighting is provided and will be used between 2300hrs and 0700hrs, this part of the lighting system complies with the lower levels of lighting recommended during these hours in Table 1 of the ILE's Guidance notes, for example by using an automatic switch to reduce the lighting levels at 2300 or earlier. Illuminated advertisements, where specified, must be designed in compliance with ILE Tech-nicely Report 5 – The Brightness of Illuminated Advertisements.	1	1	0.67	M&E Consultant/ Main Contractor	The M&E engineer or lighting design must indicate examples where and how elimination has been achieved. Drawings. Specification or external lighting calculations.	Confirmation that the design specification has been installed. Site Inspection Report.	0	0.00		External lighting details	

Green = Targeted
Blue = Not Achieved
Orange = Further Investigation

10429	23 -10429 - 65 Northcourt Avenue	BREEAM New Construction 2018 - Design Stage - Ver 1 19/07/23 (Fully Fitted)										
Credit	Criteria	Available Credits	Credits likely /	% per credit	Responsibility	Design Stage Evidence Requirement	Post Construction Stage Evidence Required	Credits awarded	% Achieved	Credit Stage	Evidence needed	
Pol 05 Noise Attenuation	One credit - where the building does have noise-sensitive areas or buildings within 800m radius of the site, one credit can be awarded as follows: a. Where a noise impact assessment in compliance with BS 7445 has been carried out and the following noise levels measured/ determined: i. Existing background noise levels at the nearest or most exposed noise-sensitive development to the proposed development or at a location where background conditions can be argued to be similar. ii. The rating noise level resulting from the new noise source. The noise impact assessment must be carried out by a suitably qualified acoustic consultant holding a recognised acoustic qualification and membership of an appropriate professional body. The noise level from the proposed site/building, as measured in the locality of the nearest or most exposed noise sensitive development, is a difference no greater than +5dB during the day (07:00 to 23:00) and +3dB at night (23:00 to 07:00) compared to the background noise level. Where the noise source(s) from the proposed site/building is greater than the levels described above, measures have been installed to attenuate the noise at its source to a level where it will comply with the above levels.	1	1	0.67	Acoustician	Noise Impact Assessment.	Results of Acoustic testing.	0	0.00		External Noise Report and Qualifications	
	Total	12	9	6.00					0	0.00		
								Target Score		BREEAM Very Good		
								Target Score		60.57		