



BREAM UK REFURBISHMENT & FIT OUT

2014 Pre-Assessment

PROJECT:

35 FOUNTAIN STREET, MANCHESTER

PROJECT NUMBER:

P2223

DOCUMENT REF:

P2223-BRE-R03

DATE:

11/11/2022

REVISION:

Rev 04

% Score

89.9%

BREEAM Rating

Targetted

Assessment Type

Major, whole building refurbishment

For a full fee breakdown refer to page 2.

KENT (HQ)

Unit 3 Grove Dairy Farm Business Centre | Bobbing Hill | Bobbing | Sittingbourne | Kent | ME9 8NY

LONDON

One Bridge Wharf | 56 Caledonian Road | London | N1 9UU

BREEAM PRE-ASSESSMENT

The explanation and outline of how to achieve each credit is found below in the following sections:



Scope

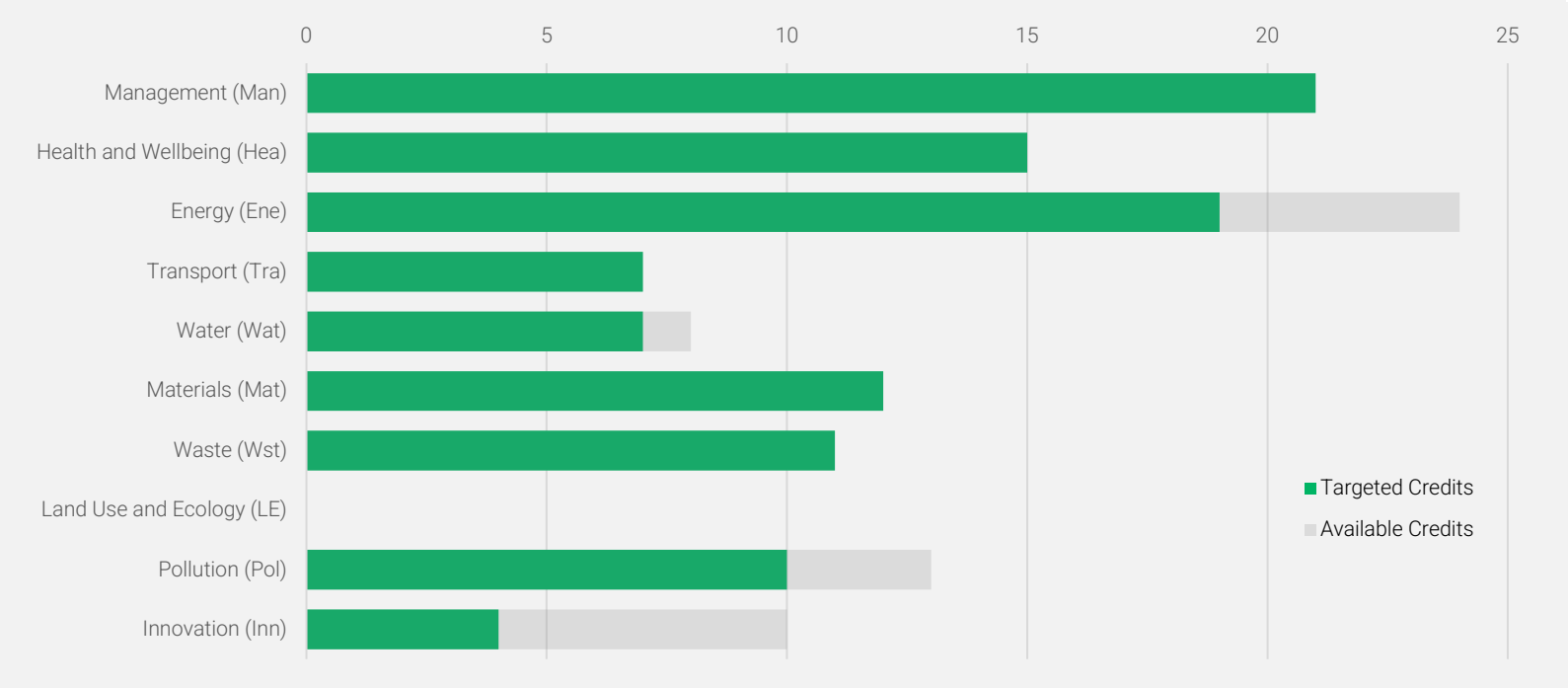
Please note: The final BREEAM score is confirmed by the BRE, not Quinn Ross Consultants. The final score will be based on the quality of information provided by the whole team, not solely Quinn Ross Consultants.

Scope of Assessment	
Project scope	Major, whole building refurbishment
Building type	Office
Is fabric and structure applicable?	N
Are core services applicable?	Y
Are local services applicable?	Y
Is interior design applicable?	N
Are lifts or escalators present?	Y
Are there systems that significantly contribute to unregulated energy?	N
Are sanitary fittings present?	Y
Are there any new or existing landscape areas within developer control?	N
Are there any external areas that can be enhanced under Land Use & Ecology?	N
Is external plant present?	Y
Is there external lighting present?	Y
Is new insulation specified?	Y
Is local heating and cooling specified?	Y

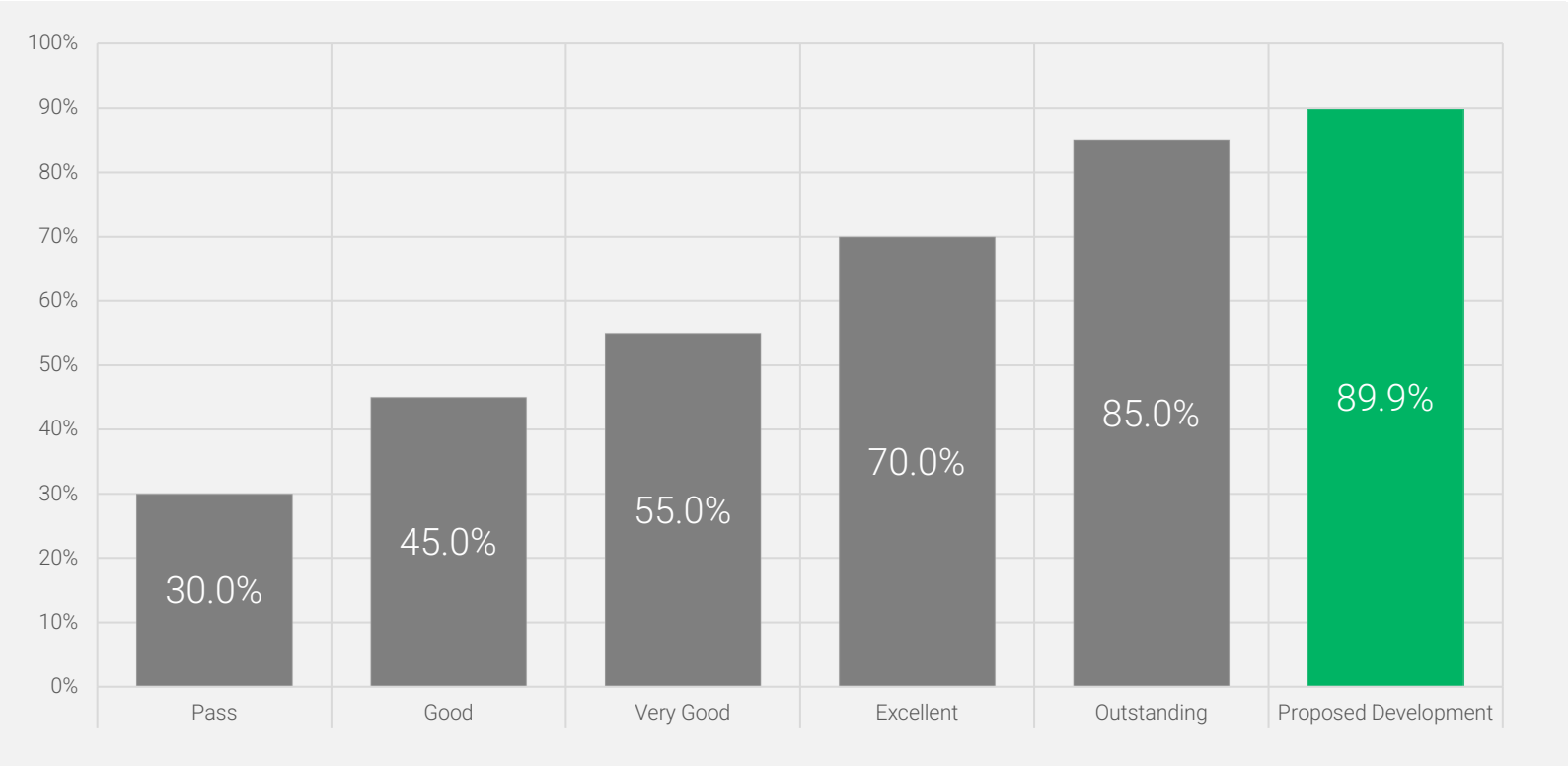
Sub-Section	Available Credits	Targeted Credits
Management (Man)	21	21
Health and Wellbeing (Hea)	15	15
Energy (Ene)	24	19
Transport (Tra)	7	7
Water (Wat)	8	7
Materials (Mat)	12	12
Waste (Wst)	11	11
Land Use and Ecology (LE)	0	0
Pollution (Pol)	13	10
Innovation (Inn)	10	4

BREEAM Rating	% Score
Pass	30.0%
Good	45.0%
Very good	55.0%
Excellent	70.0%
Outstanding	85.0%
Proposed Development	89.9%

Credit Distribution



Score



The explanation and outline of how to achieve each credit is found below in the following sections:



Please note: The client/client's representative will be responsible for sourcing the "consultant" credits. Quinn Ross can help sourcing fees for these if instructed but cannot confirm works and funds.

Please note: **Red items are mandatory**

Management (Man)

Man 01: Project brief and design	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Stakeholder consultation - project delivery	1	1	Roles , responsibilities and contributions for each phase of the project delivery have been clearly defined and inputs have influenced early design options	Design stage meeting minutes. Must mention BREEAM. Project responsibility matrix Stage reports	CBRE
Stakeholder consultation - third party	1	1	Third party stakeholders have been consulted and their contributions and outcomes are documented and shown if they have influenced design	Consultation plan/list Documented proof of consultations, e.g. meeting minutes Report stating design changes that were influenced by consultation exercise	CBRE
Sustainability Champion - design	1	1	BREEAM AP is appointed to define the BREEAM target for the project	BREEAM AP appointment/ agreed targets	QuinnRoss Energy
Sustainability Champion - monitoring progress	1	1	BREEAM AP is appointed to monitor and oversee BREEAM target through the design	BREEAM AP appointment/ stage reports	QuinnRoss Energy
Man 02: Life cycle cost and service life planning	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Elemental life cycle cost (LCC)	2	2	An Elemental Life Cycle Cost Analysis (LCC) is carried out at RIBA stage 2	LCC analysis of all predicted building elements	QuinnRoss Energy
Component level LLC Plan	1	1	A Component LCC plan is developed by the end of RIBA stage 4	LCC analysis of all predicted building components	QuinnRoss Energy
Capital cost reporting	1	1	Capital cost for the building in pounds per square metre is reported	Confirmation letter showing £/m²	CBRE / RLF
Man 03: Responsible construction practices	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Mandatory - Timber	0	0	All timber and timber-based products used on the project are to be legally harvested and traded timber	FSC or equivalent certificate from manufacturer for each timber product List of all timber products used in project, temporary and permanent, and where they were used	Contractor
Environmental Management	1	1	Principal contractor operates a certified EMS (ISO14001) Principal contractor implements best practice pollution prevention policies on-site. (PPG6)	Copy of contractor's ISO14001 certificate. Must be UKAS registered. Signed copy of the PPG6 checklist	Contractor
Sustainability Champion - construction	1	1	BREEAM AP is appoint to monitor and oversee BREEAM target through construction and has an active presence on site	Signed letter, from client/client's representative, to AP confirming appointment	QuinnRoss Energy
Mandatory - Considerate construction INN	2	2	The site achieves a Considerate Constructors Scheme (CCS) score of at least 35 with at least a score of 7 in each of the 5 sections.	Final CCS certificate	Contractor
Monitoring of construction-site-impacts	2	2	Responsibility is assigned to an individual to monitor, record and report energy, water and transport data resulting from on-site construction processes. Energy consumption is monitored and records in kWh (and where relevant litres of fuel used) Water consumption is monitored and records in m³ Transport of materials to site is monitored (total distance (km), litres of fuel (l), material type) Transport of waste from site is monitored (total distance (km), litres of fuel (l))	Written confirmation from contractor a single person has been assigned for monitoring purposes only Table/spreadsheet of meter readings Table/spreadsheet of meter readings Table/spreadsheet of mileage & fuel consumption of all deliveries to site, gate to gate, <u>not</u> depot to gate Table/spreadsheet of mileage and fuel consumption of all deliveries from site to waste/recycling centre	Contractor

The explanation and outline of how to achieve each credit is found below in the following sections:



Please note: The client/client's representative will be responsible for sourcing the "consultant" credits. Quinn Ross can help sourcing fees for these if instructed but cannot confirm works and funds.

Please note: Red items are mandatory

Man 04: Commissioning and handover	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Commissioning and testing schedule	1	1	A commissioning manager is appointed to monitor and programme commissioning in accordance with the relevant standards.	Specific commissioning schedule/programme showing dates Master project schedule/programme showing for commissioning Signed letter from contractor confirming commissioning consultant. Consultant must be external, i.e. not work for the contractor	Contractor
Commissioning building services	1	1	For complex building services, a specialist commissioning manager is appointed	Specific commissioning schedule/programme showing dates Master project schedule/programme showing for commissioning Signed letter from contractor confirming commissioning consultant. Consultant must be external, i.e. not work for the contractor	Contractor
Testing and inspecting building fabric	1	1	Perform a thermographic survey of the building and an air permeability test. Rectify any faults found from these tests prior to construction	Thermographic survey report including images Air permeability test certificate	Contractor Contractor
Mandatory - Handover	1	1	A building user guide (BUG) is developed along with a training schedule prior to handover	Copy of BUG Copy of training schedule to tenant	Contractor

Man 05: Aftercare	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Aftercare support	1	1	An extensive aftercare support system will be in place and include operational infrastructure to collect and monitor data for a minimum of 12 months.	Copy of contract showing aftercare support in it Training log to FM manager	CBRE
Mandatory - Seasonal commissioning	1	1	Seasonal commissioning activities will be completed over a minimum 12 month period	Signed letter from client/client's representative to seasonal commissioning consultant confirming appointment Signed letter from seasonal commissioning consultant confirming appointment on this project	CBRE
Post occupancy evaluation INN	1	1	The client makes a commitment to carry out a post occupancy evaluation (POE)	Signed letter from client/client's representative to POE consultant confirming appointment Signed letter from POE consultant confirming appointment on this project	CBRE

Health and Wellbeing (Hea)

Hea 01: Visual comfort	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Glare control	1	1	Disabling glare has been designed out of all relevant building areas using a glare control strategy, either through building form and layout and/or building design measures	Glare modelling report	Gray Scanlan Hill
Daylighting	2	2	Daylight modelling is required to demonstrate good practice daylight factors are achieved	Daylight modelling report	QuinnRoss Energy
View out	2	2	95% of the occupied rooms have a wall with a windows that provided a view out (window >20% of the surrounding wall area)	Marked up plans and internal elevations showing distances to windows and window to wall area ratios Signed letter from lighting designer confirming that all lighting conforms to BS's Internal and external lighting drawings, showing luminaires clearly labelled Data sheet showing lm/W for each luminaire, must match labelling on drawings Lighting schedule showing lm/W, labelling must match drawings	OMI Architects
Internal and external lighting levels, zoning and control	1	1	Internal and external lighting is designed in accordance with the reference standards. The lighting is zoned and control in the relevant areas. - zones of no more than four workplaces - workstations adjacent to windows are separately zoned	Internal lighting drawings showing lighting control zones Internal lighting calculations, such as Dialux report External lighting calculations, such as Dialux report. Must show effects on adjacent buildings if applicable using BS's Lighting control device manufacturer's data sheet/manual/literature Lighting control system commissioning certificate	Quinn Ross

The explanation and outline of how to achieve each credit is found below in the following sections:



Please note: The client/client's representative will be responsible for sourcing the "consultant" credits. Quinn Ross can help sourcing fees for these if instructed but cannot confirm works and funds.

Please note: Red items are mandatory

Hea 02: Indoor air quality	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Indoor air quality (IAQ) plan	1	1	An indoor air quality plan is developed for when the building is occupied	Copy of the indoor air quality plan	Quinn Ross
Ventilation	1	1	Ventilation pathways are designed so the air intakes and exhausts are over 10m apart	Ventilation layouts on drawings showing measurements	Quinn Ross
Volatile organic compound (VOC) emission levels - products	0	0	All decorative paints and varnishes meet VOC emissions criteria in Table 20	Manufacturer's product data sheets, for each product, confirming product emissions levels	-
Volatile organic compound (VOC) emission levels - post construction measurement	0	0	Measure formaldehyde concentration levels post construction and they must be below 100µg/m³	Consultant's testing report	-
			Total VOC (TVOC) concentration levels post construction and they must be below 300µg/m³		
Potential for natural ventilation	1	0	Occupied areas are capable of providing fresh air entirely via a natural ventilation strategy	Drawings showing natural ventilation devices, e.g. opening windows	-
				Drawings showing distances to natural vent sources and opening/free area to wall ratios	
Hea 04: Thermal comfort	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Thermal modelling	1	1	Dynamic thermal modelling is carried out to demonstrate operative temperatures are in accordance with the requirements.	Thermal modelling report	QuinnRoss Energy
Adaptability - for a project climate change scenario	1	1	The thermal modelling analysis is run against a future weather scenario	Thermal modelling report showing additional weather scenarios	QuinnRoss Energy
Thermal zoning and Controls	1	1	The thermal modelling analysis has informed the temperature control strategy	Drawings & schematics showing the heating, cooling and ventilation strategy in accordance with the criteria	Quinn Ross
				Drawings showing location of local controllers for tenants	
				OR	
				Manufacturer's literature of central HVAC controller showing it can connect to future local control	
				AND	
				Letter of confirmation from client/client's representative that the installation was fitted out prior to a known tenant and controller was fitted with capabilities to connect to local controls	
Hea 05: Acoustic Performance	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Indoor ambient noise	2	2	Sound insulation, indoor ambient noise levels and reverberation comply with the requirements	Acoustic report showing testing results	Lighthouse Acoustics
Hea 06: Safety and Security	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Security of site and building	1	1	Security specialist conducts a security needs assessment (At concept design Stage)	Security specialist report	TBC
			Security specialist develops a list of recommendations		

The explanation and outline of how to achieve each credit is found below in the following sections:



Please note: The client/client's representative will be responsible for sourcing the "consultant" credits. Quinn Ross can help sourcing fees for these if instructed but cannot confirm works and funds.

Please note: **Red items are mandatory**

Energy (Ene)

Ene 01: Reduction of energy use and carbon emissions	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Mandatory - Energy performance	15	15	Improvement of the EPC rating	Thermal modelling output files	Quinn Ross Energy
Ene 02: Energy monitoring	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Mandatory - Sub metering of major energy consuming systems	1	1	Separate energy sub metering is installed to cover the space heating, domestic hot water, small power, lighting, The meters should have a pulsed output to enable connection to a energy monitoring system. The energy meters should be suitably labelled.	Metering schematics	Quinn Ross
Sub metering of high energy load and tenancy areas	1	1	The tenancy areas will be separately sub metered		Quinn Ross
Ene 03: External lighting	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
External lighting	1	1	Average luminous efficacy is not less than 60 luminaire lumens per circuit Watt External lighting includes for a timeclock, daylight sensor and presence detection (where appropriate)	External lighting drawings, showing luminaires clearly labelled	Quinn Ross
				Data sheet showing lm/W for each luminaire, must match labelling on drawings	
				Lighting schedule showing lm/W, labelling must match drawings	
				External lighting calculations, such as Dialux report. Must show effects on adjacent buildings if applicable using BS's	
				Lighting schematic showing lighting control	
				Lighting controller manufacturer's data sheet	
Ene 04: Low carbon design	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Passive design	1	1	A passive design analysis is undertaken and the Hea 04 thermal comfort credit has been achieved	Thermal energy modelling report Photos of passive design measures from site Evidence as required for Hea 04	QuinnRoss Energy
Free cooling	1	0	Implementation of free cooling solutions	Drawings showing natural ventilation devices, e.g. opening windows Photos of free cooling devices from site	-
Low and zero carbon technologies	1	1	A low and zero carbon feasibility study has been undertaken	LZC Energy strategy Photos of renewable tech from site	QuinnRoss Energy
Ene 06: Energy efficient transportation systems	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Energy consumption	1	1	An analysis of lift and escalator demand and usage patterns for the building has been carried out to determine the size of the lift and the transportation system with the lowest energy consumption is specified	Lift usage patterns analysis/report, justifying, or not, the use of regenerative drives Manufacture's energy classification certificate	Quinn Ross
Energy efficient features	2	2	Lift and escalator standby condition during off-peak periods, energy efficient lighting and drive controller with variable speed are specified for the lift	Achieve criteria above	Quinn Ross
				Manufacturer's specification showing:	
				- lift can operate in a standby condition	
				- lift lighting is above 55 lm/W	
				- lift uses VVVF controls	
				- use a regenerative drive, if its proven to save energy (linked to usage pattern analysis above).	

The explanation and outline of how to achieve each credit is found below in the following sections:



Please note: The client/client's representative will be responsible for sourcing the "consultant" credits. Quinn Ross can help sourcing fees for these if instructed but cannot confirm works and funds.

Please note: Red items are mandatory

Transport (Tra)

Tra 01: Sustainable transport solutions	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Accessibility Index	3	3	The building's accessibility index (AI) is calculated based on local transport nodes	PTAL report	QuinnRoss Energy
Tra 02: Proximity to amenities	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Proximity to amenities	1	1	Building must be within 500m walking distance of local amenities, food outlets and open space	Report showing walking distances	QuinnRoss Energy
Tra 03: Cyclist facilities	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Cycle storage	1	1	At least 21 cycle storage spaces	Drawings showing cycle spaces	OMI Architects
Cyclist facilities	1	1	Achieve criteria 1 above	See above	
			Provide at least 2 of the following: showers, changing facilities, lockers, drying space. Spaces must be separate and dedicated for use.	Drawings showing facilities	
Tra 05: Travel plan	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Travel Plan	1	1	Produce a site specific travel plan that takes into account existing travel patterns, local environment, disabled access, public transport links and cycling facilities. It must also recommend a package of sustainable transport measures applicable to the building.	Copy of travel plan	Vectos

Water (Wat)

Wat 01: Water consumption	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Mandatory - Water consumption	5	4	Water efficient components are specified and installed: - WC - Flush volume < 4.0 l - Wash hand taps - flow rate < 4.5 l/min	Component schedule showing manufacturer, model, flow rates and quantity Manufacturer's data sheet for each component, must align with component schedule (above)	Quinn Ross
Wat 02: Water monitoring	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Mandatory - Water metering	1	1	Specification of a mains water meter on each supply (pulsed output capabilities)	Domestic water schematic showing metering clearly labelled Water meter manufacturer's datasheet	Quinn Ross
Wat 03: Water leak detection and prevention	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Leak detection system	1	1	A mains water leak detection system is installed	Domestic water schematic showing leak detector clearly labelled Leak detection unit manufacturer's datasheet Public health equipment schedule	Quinn Ross
Flow control devices	1	1	Shut off devices are installed to the cold water supply of each WC area which is linked to a PIR sensor	Domestic water schematic showing shut off devices clearly labelled Shut-off valves manufacturer's datasheet	Quinn Ross

The explanation and outline of how to achieve each credit is found below in the following sections:



Please note: The client/client's representative will be responsible for sourcing the "consultant" credits. Quinn Ross can help sourcing fees for these if instructed but cannot confirm works and funds.

Please note: Red items are mandatory

Materials (Mat)

Mat 01: Environmental impact of materials	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Elemental assessment of environmental performance information INN	6	6	Perform a Life Cycle Assessment (LCA) analysis for all new materials used on site	Marked up drawings detailing which elements are being demolished and which retained A list of new materials and quantities used on site Material manufacturer certificates confirming environmental performance LCA assessment report	QuinnRoss Energy
Mat 03: responsible sourcing of materials	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Mandatory - Timber	0	0	All timber and timber-based products used on the project is to be legally harvested and traded timber	FSC or equivalent certificate from manufacturer for each timber product List of all timber products used in project, temporary and permanent, and where they were used	Contractor
Sustainable procurement plan	1	1	Materials are sourced in accordance with a site specific sustainable procurement plan	Copy of the site specific sustainable procurement plan	Contractor
Responsible sourcing of materials	3	3	>36% of the responsible sourcing materials points have been achieved, through the specification of responsibly sourced materials.	List of new major building materials confirming quantities, cert ref np. and manufacturer/supplier	Contractor
Mat 04: Insulation	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Embodied impact of insulation	0	0	Insulation index for the building fabric (External walls, ground floor, roof) and building services insulation is greater than 2.5	Detail drawings showing constructions with insulation in them List of new insulation products used on site in constructions and on building services, showing areas/quantities Manufacturer's literature for each product showing thermal performance Manufacturer's EPD certificates for each product	-
Mat 05: Designing for durability and resilience	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Protecting vulnerable parts of the building from damage	1	1	Specification of suitable external and internal protection measures	Drawings/specification confirming measures included to protect the building e.g. Kick plates, corner protection, external kerbs and bollards etc.	OMI Architects
Protecting exposed parts from material degradation			Specification of measures to limit material degradation due to environmental factors	Drawings/specification confirming the inclusion of measures to limit material degradation effects (corrosion, swelling, fading, rotting melting abrasion etc.).	
Mat 06: Material efficiency	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Material efficiency	1	1	Opportunities have been identified, investigated and documented to optimise the use of materials throughout the building design, procurement and refurbishment.	Report documenting investigations at each RIBA stage	OMI Architects

Waste (Wst)

Wst 01: Construction waste management	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Pre-refurbishment audit	1	1	A pre-refurbishment audit is carried out to identify if materials can be retained, reused, recycled or need replacing	Pre-refurbishment audit	Contractor
Re-use and direct recycling of materials	2	2	Where over 50% of the waste materials types are reused and or directly recycled	SWMP/RMP showing targeted benchmarks	Contractor
Resource efficiency	3	3	A compliant SWMP is to be developed and the amount of non-hazardous waste generated per 100m² of gross internal floor area is less than 1.2 tonnes.	SWMP/RMP showing targeted benchmarks	Contractor
Diversion of resources from landfill	1	1	Requires at least 90% (by tonnage) of refurbishment waste and 95% of demolition waste to be diverted from landfill. Also requires waste material to be sorted into separate key waste groups either on-site or through a licensed contractor	SWMP/RMP showing targeted benchmarks	Contractor

The explanation and outline of how to achieve each credit is found below in the following sections:



Please note: The client/client's representative will be responsible for sourcing the "consultant" credits. Quinn Ross can help sourcing fees for these if instructed but cannot confirm works and funds.

Please note: **Red items are mandatory**

Wst 03: Operational waste	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Mandatory - Operational waste	1	1	Provision of a dedicated spaces for the segregation and storage of operational recyclable waste. Spaces must be clearly labelled for each waste stream	Drawing indicating the location of the bin store provision	OMI Architects
Wst 04: Speculative finishes	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Speculative floor and ceiling finishes	1	1	Where the future occupant is not known and prior to full fit out works interior finishes have only been installed in a show area	Marked up floor plans of show area	-
			OR	OR	-
			Don't install any finishes	Photos showing no finishes on site	Quinn Ross Energy
Wst 05: Adaptation to climate change	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Adaption to climate change - structural and fabric resilience INN	1	1	A climate change adaptation strategy appraisal for the structural and fabric resilience is undertaken	Climate change strategy report	OMI Architects
Wst 06: Functional adaptability	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Functional adaptability	1	1	The building accommodates future adaptable measures	Report detailing adaptable measures	OMI Architects

Land Use and Ecology (LE)

LE 02: Protecting Ecological Features	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Protection of ecological features	0	0	All existing ecological features are protected from clearance, site preparation and refurbishment works	Ecologist's report	-
				Drawings and/or photos of ecological protection measures on site	-
LE 04: Enhancing Site Ecology	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Ecologist's report and recommendations	0	0	Ecologist's report outlining how site ecology can be enhanced by the development	Ecologist's report	-
			Proof of recommendations from ecologist's report have been installed on site	Drawings, photos, proof of purchase of plant species if applicable, that ecologist's measures will be implemented	-
LE 05: Long Term Impact on Biodiversity	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Ecologist's report and recommendations	0	0	Ecologist produces a landscape and habitat management plan that covers the first 5 years of occupancy	Ecologist's report	-
			Plan must be handed over to future occupant	Signed letter from client/client's representative that plan will be handed over to FM	-

Pollution (Pol)

Pol 01: Impact of refrigerants	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Impact of refrigerant	2	2	The emissions from the refrigerant system are reduced.	Air Conditioning equipment schedule	Quinn Ross
Leak detection	1	1	A permanent automated refrigerant leak detection system capable of continuously monitoring for leaks	Manufacturer's datasheet for the AC system confirming efficiency	
				Drawings/Schematics showing leak detection system clearly labelled	
				Manufacturer's datasheet for the leak detection system	

The explanation and outline of how to achieve each credit is found below in the following sections:



Please note: The client/client's representative will be responsible for sourcing the "consultant" credits. Quinn Ross can help sourcing fees for these if instructed but cannot confirm works and funds.

Please note: Red items are mandatory

Pol 02: NOx emissions	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Plant NOx emissions	3	0	NOx emissions for the heating and hot water are limited to <40mg/kWh	Heating equipment schedule Manufacturer's datasheet for the heating system confirming NOx emissions	-
Pol 03: Flood risk management and reducing surface water run-off	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Flood risk management	2	2	Review flood maps from local statutory body <u>OR</u> if area is in a Critical Drainage Area (CDA) then a full flood risk assessment by a consultant is needed	Environmental Agency (EA) flood zone map The Risk of Flooding from Surface Water (RoFfSW map Local council flood and surface water planning policies check Flood Risk Assessment (FRA)	IGE IGE
Surface water run-off	1	1	Show there is no increase in impermeable surfaces	Marked up site plan showing impermeable surfaces for existing and proposed developments	OMI Architects
Minimising watercourse pollution	0	0	Calculations to demonstrate the run-off rates for the site meet the BREEAM criteria/ for one credit if there is no increase in impermeable area No discharge from the site for rainfall up to 5mm and the provision of pollution interceptors were appropriate	Drainage drawings Surface water run-off calculations report	-
Pol 04: Reduction of night time light pollution	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
External lighting	1	1	External lighting strategy complies with the necessary standards and the circuit has a timeclock	Signed letter from lighting designer confirming that all lighting conforms to BS's External lighting drawings, showing luminaires clearly labelled External lighting calculations, such as Dialux report. Must show effects on adjacent buildings if applicable using BS's Lighting control device manufacturer's data sheet/manual/literature	Quinn Ross
Pol 05: Reduction of noise pollution	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Noise pollution	1	1	A noise impact assessment is carried out in compliance with BS 7445 and noise pollution levels are restricted.	Acoustic report outlining recommendations	Lighthouse Acoustics
Innovation (Inn)	Available Credits	Targetted Credits	Credit Requirements	Evidence Requirements	Responsibility
Inn 01: Innovation	10	4	Having exemplary performance in existing BREEAM credits and having an innovative credit applied to the project, approved by BRE	Refer to each scheme for exemplary performance indicator	Credit Dependant