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**Code for Sustainable Homes  
& BREEAM 2011 NC  
Pre-Assessment  
St Paul's School, London**

1/DNP/131010  
Revision 1

Report Prepared For: Hugh Muirhead



Issue	Date	Reason for Issue	Prepared		Checked		Approved	
1	17 Oct 2013	Planning	DNP	17/10	LA	17/10	LA	17/10

**Code for Sustainable Homes & BREEAM NC - Pre-Assessment**

1/DNP/131010

Revision 1

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# 01

## Executive Summary

### 1. **Executive Summary**

The proposed new staff accommodation buildings at St Pauls' School in London will contain 33 units in three separate buildings; Blocks A, B & C. The Blocks have been assessed against the latest version of the Code for Sustainable Homes and BREEAM NC 2011 Multi-Residential schemes.

Code for Sustainable Homes is an environmental assessment method for rating and certifying the performance of new homes. Based on the current design, all the self-contained flats in Blocks A, B and C would be able to meet the Code for Sustainable Homes target rating requirements of Level 4.

BREEAM New Construction for non domestic buildings provides a whole building assessment methodology which can also be applied to a building containing self-contained dwellings and communal facilities. Block B, assessed against the BREEAM NC 2011 Multi-Residential scheme would be able to meet the target rating requirements of Excellent.

Both the Code for Sustainable Homes and BREEAM NC 2011 Multi-Residential schemes cover nine categories of sustainable design.

# 02

## Introduction

### 2. Introduction

A total of 33 units are proposed in three separate buildings. These units would accommodate the School's staff (and their immediate family). The Lonsdale Road building (Block A) would include 6 three bedroom apartments, 2 two bedroom apartments and 2 studio apartments.

Two blocks of accommodation are proposed along St Paul's School driveway: Block B would accommodate 16 study bedrooms, 2, studio apartments, 2 one-bedroom apartments and 1 two-bedroom apartment and Block C would accommodate 2 two-bedroom apartments.

#### Code for Sustainable Homes

The Code for Sustainable Homes is an environmental assessment method for rating and certifying the performance of new homes. It replaced EcoHomes in England & Wales as the national standard for use in the design and construction of new homes. It was launched in December 2006 and became operational in April 2007. The latest version is Code for Sustainable Homes November 2010.

The Code for Sustainable Homes covers nine categories of sustainable design:

- Energy and CO<sub>2</sub> Emissions
- Water
- Materials
- Surface Water Run-off
- Waste
- Pollution
- Health and Well-being
- Management
- Ecology

An assessment comprises mandatory minimum performance standards such as achieving a minimum 25% improvement in Dwelling Emission Rate over Target Emission Rate as well as tradable requirements such as providing space to store bicycles safely.

A level 4 rating requires a minimum score of 68% and is considered to be equivalent to a BREEAM rating of Excellent.

# 02

## Introduction

### **BREEAM Multi-residential and the Code for Sustainable Homes**

BREEAM New Construction for non domestic buildings provides a whole building assessment methodology which can also be applied to a *building containing self-contained dwellings and communal facilities*.

The New Construction scheme provides a whole building assessment methodology which can also be applied to buildings which contain dwellings assessed under the CSH, but also communal facilities within the same building, to

Where both a Code for Sustainable Homes and a BREEAM assessment are required, to avoid duplication of effort evidence collected for the CSH assessment can be used towards demonstrating compliance with the equivalent BREEAM assessment criteria and vice versa. The latest version is BREEAM New Construction 2011.

BREEAM New Construction covers nine categories of sustainable design:

- Management
- Health and Well-being
- Energy
- Transport
- Water
- Materials
- Waste
- Land Use & Ecology
- Pollution

An assessment comprises mandatory minimum performance standards such as achieving a minimum number of credits for CO<sub>2</sub> emission reduction and water consumption as well as tradable requirements such as providing low NOx emitting space heating equipment.

An Excellent rating requires a minimum score of 70%.

# 03

## Code for Sustainable Homes Results

### 3. Code for Sustainable Homes Results

#### Credit Breakdown

**PREDICTED RATING - CODE LEVEL: 4**

**Mandatory Requirements: All Levels**

**% Points: 70.86% - Code Level: 4**

**Breakdown: Energy - Code Level: 4**

**Water - Code Level: 4**

Building Performance by Section					
	Environmental weighting	Credits available	Credits achieved	% Achieved	Weighted Score
Energy	36.4	31	19	61.29	22.30
Water	9.0	6	4	66.66	6.0
Materials	7.2	24	17	70.83	5.1
Surface Water Run-off	2.2	4	2	50.0	1.1
Waste	6.4	8	8	100.0	6.4
Pollution	2.8	4	4	100.0	2.8
Health & Wellbeing	14.0	12	9	75.0	10.5
Management	10.0	9	9	100.0	10
Ecology	12.0	9	5	55.0	6.66
<b>Total CfSH Score</b>					<b>70.86%</b>

# 04

## BREEAM NC Results

### 4. BREEAM NC Results

#### Credit Breakdown

BREEAM 2011 New Construction Assessment Report: Rating & Key Performance Indicators		BREEAM®
This assessment and indicative BREEAM rating is not a formal certified BREEAM assessment or rating and must not be communicated as such. The score presented is indicative of a building's potential performance and is based on a simplified pre-formal BREEAM assessment and unverified commitments given at an early stage in the design process.		
Overall Indicative Building Performance		
Building name	St Paul's School - Block B	
Indicative building score (%)	72.58%	
Indicative BREEAM rating	Pre-Assessment result indicates potential for BREEAM Excellent rating	
Indicative minimum standard level achieved	Pre-Assessment result indicates the minimum standards for Excellent level	

	Building Performance by Section				
	Environmental weighting	Credits available	Credits achieved	% Achieved	Weighted Score
Management	12.0	22	17	77.27	9.27
Health & Wellbeing	15.0	16	13	81.25	12.19
Energy	19.0	27	17	62.96	11.96
Transport	8.0	9	6	66.66	5.33
Water	6.0	9	7	77.77	4.67
Materials	12.5	13	8	61.53	7.69
Waste	7.5	6	4	66.66	5.00
Land Use & Ecology	10	10	6	60.00	6.00
Pollution	10	13	11	84.61	8.46
Innovation	10	10	2	20.00	2.00
<b>Total BREEAM Score</b>					<b>72.58%</b>

Code for Sustainable Homes &  
BREEAM NC - Pre-Assessment  
St Paul's School, London  
1/DNP/131010  
Revision 1





# 05

Appendix

## 5. Appendix



**Results**

Development Name:	St Paul's School
Dwelling Description:	
Name of Company:	Grontmij
Code Assessor's Name:	David Partington
Company Address:	1 Bath Road, Maidenhead, Berkshire, SL6 4AQ
Notes/Comments:	Typical Apartment

**PREDICTED RATING - CODE LEVEL: 4**

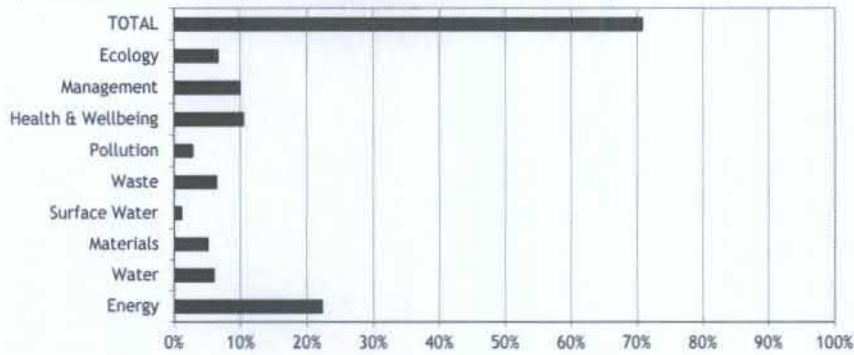
Mandatory Requirements: All Levels

% Points: 70.86% - Code Level: 4

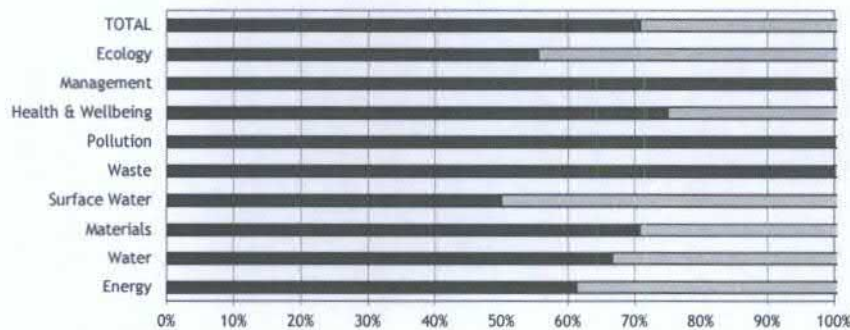
Breakdown: Energy - Code Level: 4

Water - Code Level: 4

Graph 1: Predicted contribution of individual sections to the total score and percentage of total achievable score



Graph 2: Predicted percentage of credits achievable: Total and by Category



NOTE: The rating obtained by using this Pre Assessment Estimator is for guidance only. Predicted ratings may differ from those obtained through a formal assessment, which must be carried out by a licensed Code assessor.

Code for Sustainable Homes  
PRE ASSESSMENT ESTIMATOR TOOL

This estimator is provided for use as a guide only. It is not intended to be used as a substitute for professional advice. Whilst every care is taken in preparing this estimator, BREG cannot accept responsibility for any inaccuracies or for consequential loss incurred as a result of such inaccuracies arising through the use of the estimator tool.

CATEGORY 1 ENERGY		Overall Level: 4	Overall Score 70.86		Evidence Required
% of Section Credits Predicted: 61.29		Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if required.)
Contribution to Overall % Score: 22.30 points		19.0 of 31 Credits	Level 4		
Ene 1 Dwelling Emission Rate	<p>Credits are awarded based on the percentage improvement of the Dwelling Emission Rate (DER) over the Target Emission Rate (TER) as calculated using SAP 2009. Minimum standards for each Code level apply. The Code energy calculator can be used to calculate a predicted score.</p> <p>Enter the predicted score _____</p> <p>What is the predicted number of credits? <input type="text" value="3.0"/></p> <p>OR Are zero net CO<sub>2</sub> emissions achieved? <input type="checkbox"/></p>	3.0 of 10 Credits	Level 4	Mandatory requirement to achieve a 25% reduction in Dwelling Emission Rate (DER) over the Target Emission Rate using SAP 2009 software. 25% achieves 3 credits, 36% achieves 4 credits. DER can be based on either an individual apartment or as an area weighted average of all the apartments within each block.	The predicted improvement over 2006 Part L is almost equivalent to the 25% improvement under 2010 Part L.
Ene 2 Fabric Energy Efficiency	<p>Credits are awarded based on the Fabric Energy Efficiency (kWh/m<sup>2</sup>/yr) of the dwelling. Minimum standards apply at Code levels 5 and 6. The Code energy calculator can be used to calculate a predicted score.</p> <p>Enter the predicted score _____</p> <p>Apartments, Mid-terrace <input checked="" type="radio"/></p> <p>OR End terrace, Semi and Detached <input type="radio"/></p> <p>OR Staggered Mid terrace <input type="radio"/></p> <p>What is the predicted number of credits? <input type="text" value="5.0"/></p>	5.0 of 9 Credits	-	Fabric Energy Efficiency (FEE) can be based on either an individual apartment or as an area weighted average of all the apartments within each block. Use whichever is most beneficial. A FEE score of 48kWh/m <sup>2</sup> /year achieves 3 credits, 43kWh/m <sup>2</sup> /year achieves 5 credits.	FEE score affected by the fabric u-values, amount & orientation of windows & air permeability amongst other things.
Ene 3 Energy Display Devices	<p>Credits are awarded where a correctly specified Energy Display Device is installed monitoring electricity and/or primary heating fuel consumption.</p> <p>Select whether the EDD monitors electricity and/or fuel _____</p> <p>None Specified <input type="radio"/></p> <p>Primary Heating only <input type="radio"/></p> <p>OR Electricity only <input type="radio"/></p> <p>OR Electricity and primary heating fuel <input checked="" type="radio"/></p>	2 of 2 Credits	-	Compliant Energy Display Devices are available.	

Issue	Credits	Level	Assumptions Made	Evidence Required
<p>Ene 4 Drying Space</p>	<p>One credit is awarded for the provision of either internal or external secure drying space with posts and footings or fixings capable of holding 4m+ of drying line for 1-2 bed dwellings and 6m+ for dwellings with 3 bedrooms or greater.</p> <p>Will drying space meeting the criteria be provided? _____</p> <p>Yes <input type="radio"/></p> <p>OR No <input checked="" type="radio"/></p>	<p>0 of 1 Credits</p>	<p>-</p>	<p>Possible to include a drying line in each bathroom. Also possible to include one in the studio &amp; one bed apartments but where there is only a shower room, this may be impractical.</p>
<p>Ene 5 Energy Labelled White Goods</p>	<p>Credits are awarded where each dwelling is provided with either information about the EU Energy Labelling Scheme, White Goods with ratings ranging from A+ to B or a combination of the previous according to the technical guide.</p> <p>Select the appropriate option below _____</p> <p>EU Energy labelling information <u>only</u> <input type="checkbox"/></p> <p>A+ rated appliances <input checked="" type="checkbox"/></p> <p>A rated washing machine and dishwasher <input checked="" type="checkbox"/></p> <p>B rated tumble dryer or washer dryer <input type="checkbox"/></p> <p>EU Energy labelling information provided <input checked="" type="checkbox"/></p>	<p>2 of 2 Credits</p>	<p>-</p>	<p>Both credits can only be achieved if A+ rated fridges, freezers, fridges/freezers are supplied AND either an A rated washing machine or dishwasher AND the EU labelling scheme leaflet is provided. The provision of a washer/dryer instead of a washing machine is not sufficient.</p>
<p>Ene 6 External Lighting</p>	<p>Credits are awarded based on the provision of space lighting* with dedicated energy efficient fittings and security lighting fittings with appropriate control gear..</p> <p>Space Lighting _____</p> <p>None provided <input type="radio"/></p> <p>OR Non Code compliant lighting <input type="radio"/></p> <p>OR Code compliant lighting <input checked="" type="radio"/></p> <p>Security Lighting _____</p> <p>None provided <input type="radio"/></p> <p>OR Non Code compliant lighting <input type="radio"/></p> <p>OR Code compliant lighting and controls <input checked="" type="radio"/></p> <p>Dual lamp luminaires _____</p> <p>Compliant with both above criteria <input type="checkbox"/></p> <p>* Statutory safety lighting is not covered by this requirement</p>	<p>2 of 2 Credits</p>	<p>-</p>	<p>If the scheme is targeting a Secure by Design (SBD) certificate or is aiming to meet Section 2 only of the SBD scheme, the SBD scheme requirements take precedence.</p>

Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 7 Low or Zero Carbon Technologies	<p>Credits are awarded where there is a 10% or 15% reduction in CO<sub>2</sub> emissions resulting from the use of low or zero carbon technologies.</p> <p>Select % contribution made by low or zero carbon technologies</p> <p>Less than 10% of demand <input type="radio"/></p> <p>OR 10% of demand or greater <input type="radio"/></p> <p>OR 15% of demand or greater <input checked="" type="radio"/></p>	2 of 2 Credits	-	20% contribution from renewables.	
Ene 8 Cycle Storage	<p>Credits are awarded where adequate, safe, secure and weather proof cycle storage is provided according to the Code requirements.</p> <p>Fill in the development details below</p> <p>Number of bedrooms: <input type="text"/></p> <p>Number of cycles stored per dwelling* <input type="text" value="1.0"/></p> <p>* If you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles stored per dwelling</p>	2 of 2 Credits	-	Assume residents will have access to the cycle store in Block B.	
Ene 9 Home Office	<p>A credit is awarded for the provision of a home office. The location, space and services provided must meet the Code requirements.</p> <p>Will there be provision for a Home Office? <input checked="" type="radio"/></p> <p>OR No <input type="radio"/></p>	1 of 1 Credits	-	There may not be sufficient space to accommodate the home office furniture as well as all other furniture expected to be in a bedroom/living room. A minimum average daylight factor of 1.5% is also required.	

CATEGORY 2 WATER		Overall Level: 4	Overall Score	70.86	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 66.66		Credits	Level			
Contribution to Overall Score: 6.00 points		4 of 6 Credits	Level 4			
Wat 1 Indoor Water Use	<p>Credits are awarded based on the predicted average household water consumption, calculated using the Code Water Calculator Tool. Minimum standards for each code level apply.</p> <p>Select the predicted water use / Mandatory Requirement</p> <ul style="list-style-type: none"> <li>greater than 120 litres/ person/ day <input type="radio"/></li> <li>OR ≤ less than 120 litres/ person/ day <input type="radio"/></li> <li>OR ≤ less than 110 litres/ person/ day <input type="radio"/></li> <li>OR ≤ less than 105 litres/ person/ day <input checked="" type="radio"/></li> <li>OR ≤ less than 90 litres/ person/ day <input type="radio"/></li> <li>OR ≤ less than 80 litres/ person/ day <input type="radio"/></li> </ul>	3 of 5 Credits	Level 3 AND Level 4	<p>The Water Efficiency Calculator for New Dwellings methodology is used to calculate the water consumption per person per day based on the sanitaryware and and white goods specified within each apartment. It is a mandatory requirement to achieve at least 105L/person/day if a Level 4 rating is targeted. This achieves 3 credits.</p>		
Wat 2 External Water Use	<p>A credit is awarded where a compliant system is specified for collecting rainwater for external irrigation purposes. Where no outdoor space is provided the credit can be achieved by default.</p> <p>Select the scenario that applies</p> <ul style="list-style-type: none"> <li>No internal or communal outdoor space <input type="radio"/></li> <li>OR Outdoor space with collection system <input checked="" type="radio"/></li> <li>OR Outdoor space without collection system <input type="radio"/></li> </ul>	1 of 1 Credits	-	<p>If there is no communal internal/outdoor space provided then the credit can be claimed by default. There appears to be space between Blocks B &amp; C and to the east of Block B. Possibly water butts will be required to achieve the credit.</p>		

CATEGORY 3 MATERIALS		Overall Level: 4	Overall Score	70.86		Evidence Required
% of Section Credits Predicted: 70.83			Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if required.)
Contribution to Overall Score: 5.10 points			17 of 24 Credits	All Levels		
Mat 1 Environmental Impact of Materials	<p><b>Mandatory Requirement:</b> At least three of the five key building elements must achieve a Green Guide 2008 Rating of A+ to D.</p> <p><b>Tradable Credits:</b> Points are awarded on a scale based on the Green Guide Rating of the specifications. The Code Materials Calculator can be used to predict a potential score.</p> <p>Mandatory Requirement <input type="checkbox"/></p> <p>Will the mandatory requirement be met? <input checked="" type="checkbox"/></p> <p>Enter the predicted score <input type="text"/></p> <p>What is the predicted number of credits? <input type="text" value="10"/></p>	10 of 15 Credits	All Levels	<p>Every element achieving a B rating will achieve 5 credits. Every element achieving an A rating will achieve 10 credits. Every element achieving an A+ rating will achieve 15 credits.</p> <p>Typically, precast reinforced upper floor slabs are rated as D or E.</p> <p>4 out of the 5 elements achieving an A rating achieves 8 credits.</p>	Mandatory requirement doesn't achieve any credits. 100% of each external/internal wall, roof, window and floor (ground & upper) has to be rated A+ to D. Even if just 0.1% of an element is rated as E, the element doesn't comply.	
Mat 2 Responsible Sourcing of Materials - Basic Building Elements	<p>Credits are awarded where materials used in the basic building elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score.</p> <p>Enter the predicted Score <input type="text"/></p> <p>What is the predicted number of credits? <input type="text" value="4"/></p>	4 of 6 Credits	-	<p>Every element sourced from suppliers with an EMS such as ISO 14001 would achieve 2 credits. 3 or 4 credits should be achievable.</p>		
Mat 3 Responsible Sourcing of Materials - Finishing Elements	<p>Credits are awarded where materials used in the finishing elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score.</p> <p>Enter the predicted Score <input type="text"/></p> <p>What is the predicted number of credits? <input type="text" value="3"/></p>	3 of 3 Credits	-	<p>Almost all timber nowadays is certified as FSC or equivalent hence a minimum of 2 credits at least should be achievable.</p>		



CATEGORY 4 SURFACE WATER RUN-OFF		Overall Level: 4	Overall Score 70.86		
% of Section Credits Predicted: 50.00%		Credits Level		Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
Contribution to Overall Score: 1.10 points		2 of 4 Credits	All Levels		
Sur 1 Management of Surface Water Run-off from developments	<p><b>Mandatory Requirement:</b> Peak rate of run-off into watercourses is no greater for the developed site than it was for the pre-development site and that the additional predicted volume of rainwater discharge caused by the new development is entirely reduced as far as possible in accordance with the assessment criteria. Designing the drainage system to be able to cope with local drainage system failure. <b>Tradable Credits:</b> Where SUDS are used to improve water quality of the rainwater discharged or for protecting the quality of the receiving waters.</p> <p>Mandatory Requirement <input type="checkbox"/></p> <p>Will the mandatory requirement be met? <input checked="" type="checkbox"/></p> <p>Select the appropriate option <input type="checkbox"/></p> <p>No SUDS <input checked="" type="checkbox"/></p> <p>No runoff into watercourses for the first 5 mm of rainfall <input type="checkbox"/></p> <p>Runoff from hard surfaces will receive an appropriate level of treatment <input type="checkbox"/></p>	0 of 2 Credits	All Levels	Unless the design cleans up any rainwater before leaving site or is designed to contain all rainfall up to 5mm on site, no credits can be achieved.	Mandatory requirement achieves no credits.
Sur 2 Flood Risk	<p>Credits are awarded where developments are located in areas of low flood risk or where in areas of medium or high flood risk appropriate measures are taken to prevent damage to the property and its contents in accordance with the Code criteria in the technical guide.</p> <p>Select the annual probability of flooding (from PPS25*) <input type="checkbox"/></p> <p>Zone 1 - Low <input type="radio"/></p> <p>OR Zone 2 - Medium <input type="radio"/></p> <p>OR Zone 3 - High <input checked="" type="radio"/></p> <p>Select the appropriate option(s) <input type="checkbox"/></p> <p>Low risk of flooding from FRA** <input checked="" type="checkbox"/></p> <p>All measures of protection are demonstrated in FRA <input type="checkbox"/></p> <p>Ground floor level and access routes are 600 mm above design flood level <input type="checkbox"/></p>	2 of 2 Credits			

\* Planning Policy Statement 25 - Planning and Flood Risk

\*\* FRA - Flood Risk Assessment

CATEGORY 5 WASTE		Overall Level: 4	Overall Score 70.86					
% of Section Credits Predicted: 100.00%			Credits	Level	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)		
Contribution to Overall Score: 6.40 points			8 of 8 Credits	All Levels				
Was 1 Storage of non-recyclable waste and recyclable household waste	<p><b>Mandatory Requirement:</b> The space provided for waste storage should be sized to hold the larger of either all external containers provided by the Local Authority or the min capacity calculated from BS 5906. <u>Tradable Credits</u> are awarded for adequate internal and/ or external recycling facilities.</p> <p>Mandatory Requirement</p> <p>Will the minimum space be provided and be accessible to disabled people? <input checked="" type="checkbox"/></p> <p>Internal Recyclable household waste storage</p> <p>Where there is no external recyclable waste storage and no Local Authority collection scheme</p> <p>Internal storage (capacity 60 litres) <input type="checkbox"/></p> <p>Local Authority collection Scheme</p> <p>Post Collection sorting Internal storage (capacity 30 litres) <input checked="" type="checkbox"/></p> <p>Pre-collection sorting Internal storage (3 separate bins, capacity 30 litres) <input type="checkbox"/></p> <p>External Storage, no Local Authority collection scheme</p> <p>3 separate internal storage bins (capacity 30 litres) <input type="checkbox"/></p> <p><b>AND</b></p> <p>Houses External Storage(capacity 180 litres) <input type="checkbox"/></p> <p>Flats <input type="checkbox"/></p> <p>Private recycling operator <input type="checkbox"/></p> <p>3 or greater types of waste collected <input type="checkbox"/></p>		0 of 2 Credits	4 of 4 Credits	All Levels	0 of 4 Credits	The mandatory requirement relates to normal household waste. The 4 credits can be achieved by providing each apartment with a dedicated recycle bin in a kitchen cupboard. Whether Richmond sorts the recycled post or pre-collection determines the type of internal storage bin.	Mandatory requirement achieves no credits.

Issue		Credits	Level	Assumptions Made	Evidence Required
Was 2 Construction Site Waste Management	<p>A credit is awarded where a compliant SWMP is provided with targets and procedures to minimise construction waste. Credits are available where the SWMP include procedures and commitments for diverting either 50% or 85% of waste generated from landfill.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>SWMP details</p> <p>Does the SWMP include:</p> <ul style="list-style-type: none"> <li>• No SWMP <input type="radio"/></li> <li>• SWMP with targets and procedures to minimise waste? <input type="radio"/></li> <li>• SWMP with procedures to divert 50% of waste <input type="radio"/></li> <li>• SWMP with procedures to divert 85% of waste <input checked="" type="radio"/></li> </ul> </div>	3 of 3 Credits		A SWMP with 85% of waste diverted from landfill is typically achievable.	
Was 3 Composting	<p>A credit is awarded where individual home composting facilities are provided, or where a community/ communal composting service, either run by the Local Authority or overseen by a management plan is in operation.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Select the facilities available</p> <ul style="list-style-type: none"> <li>No composting facilities <input type="radio"/></li> <li>Individual composting facilities <input checked="" type="radio"/></li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>Communal/ community composting? <input type="radio"/></li> <li>Local Authority <input checked="" type="checkbox"/></li> <li>OR Private with management plan <input type="checkbox"/></li> </ul> </div>	1 of 1 Credit		A communal composting scheme is not recommended but the credit may be available as Richmond run a garden waste & kitchen waste collection scheme.	

\* including if an automated waste collection system is in place

CATEGORY 6 POLLUTION		Overall Level: 4	Overall Score 70.86		Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 100.00%			Credits	Level	
Contribution to Overall Score: 2.80 points			4 of 4 Credits	All Levels	
Pol 1 Global Warming Potential (GWP) of Insulants	<p>A credit is awarded where <u>all</u> insulating materials only use substances (in manufacture AND installation) that have a GWP of less than 5.</p> <p>Select the most appropriate option</p> <p>All insulants have a GWP less than 5 <input checked="" type="radio"/></p> <p>OR Some insulants have a GWP of less than 5 <input type="radio"/></p> <p>OR No insulants have a GWP of less than 5 <input type="radio"/></p>	1 of 1 Credits	-	Most well known insulation has a GWP less than 5.	
Pol 2 NOx Emissions	<p>Credits are awarded on the basis of NOx emissions arising from the operation of the space and water heating system within the dwelling.</p> <p>Select the most appropriate option</p> <p>Greater than 100 mg/kWh <input type="radio"/></p> <p>OR Less than 100 mg/kWh <input type="radio"/></p> <p>OR Less than 70 mg/kWh <input type="radio"/></p> <p>OR Less than 40 mg/kWh <input checked="" type="radio"/></p> <p>OR Class 4 boiler <input type="radio"/></p> <p>OR Class 5 boiler <input type="radio"/></p> <p>OR All space and hot water energy requirements are met by systems who do not produce NOx emissions <input type="radio"/></p>	3 of 3 Credits	-	The space heating & DHW system will determine whether any credits can be achieved. Heating from Air Source Heat Pumps will achieve 0 credits however as it uses Mains electricity. CHP may require a catalytic converter.	

CATEGORY 7 HEALTH & WELLBEING		Overall Level: 4	Overall Score 70.86																		
% of Section Credits Predicted: 75.00%		Credits Level		Assumptions Made	Evidence Required																
Contribution to Overall Score: 10.50 points		9 of 12 Credits	No level		(The below cells can be formatted by assessors if required.)																
Hea 1 Daylighting	<p>Credits are awarded for ensuring key rooms in the dwelling have high daylight factors (DF) and a view of the sky.</p> <p>Select the compliant areas</p> <table border="1"> <tr> <td>Room</td> <td></td> </tr> <tr> <td>Kitchen: Avg DF of at least 2%</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Living Room*: Avg DF of at least 1.5%</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Dining Room*: Avg DF of at least 1.5%</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Study*: Avg DF of at least 1.5%</td> <td><input type="checkbox"/></td> </tr> <tr> <td>80% of working plane in all above rooms receive direct light from the sky?</td> <td><input checked="" type="checkbox"/></td> </tr> </table> <p>Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.</p>	Room		Kitchen: Avg DF of at least 2%	<input type="checkbox"/>	Living Room*: Avg DF of at least 1.5%	<input type="checkbox"/>	Dining Room*: Avg DF of at least 1.5%	<input type="checkbox"/>	Study*: Avg DF of at least 1.5%	<input type="checkbox"/>	80% of working plane in all above rooms receive direct light from the sky?	<input checked="" type="checkbox"/>	1 of 3 Credits	-	Requires daylight factor calculations. Typically kitchens struggle to achieve 2% but might be okay in this instance. As a minimum, I would think each apartment could achieve at least 1 out of the 3 credits available.					
Room																					
Kitchen: Avg DF of at least 2%	<input type="checkbox"/>																				
Living Room*: Avg DF of at least 1.5%	<input type="checkbox"/>																				
Dining Room*: Avg DF of at least 1.5%	<input type="checkbox"/>																				
Study*: Avg DF of at least 1.5%	<input type="checkbox"/>																				
80% of working plane in all above rooms receive direct light from the sky?	<input checked="" type="checkbox"/>																				
Hea 2 Sound Insulation	<p>Credits are awarded where performance standards exceed those required in Building Regulations Part E. This can be demonstrated by carrying out pre-completion testing or through the use of Robust Details Limited.</p> <p>Select a type of property</p> <table border="1"> <tr> <td>Detached Property</td> <td><input type="radio"/></td> </tr> <tr> <td>Attached Properties:</td> <td></td> </tr> <tr> <td>- Separating walls and floors only exist between non habitable spaces</td> <td><input type="radio"/></td> </tr> <tr> <td>- Separating walls and floors exist between habitable spaces</td> <td><input checked="" type="radio"/></td> </tr> </table> <p>Select a performance standard</p> <table border="1"> <tr> <td>Performance standard not sought</td> <td><input type="radio"/></td> </tr> <tr> <td>Airborne: 3db higher; Impact: 3dB lower</td> <td><input type="radio"/></td> </tr> <tr> <td>OR Airborne: 5db higher; Impact: 5dB lower</td> <td><input checked="" type="radio"/></td> </tr> <tr> <td>OR Airborne: 8db higher; Impact: 8dB lower</td> <td><input type="radio"/></td> </tr> </table>	Detached Property	<input type="radio"/>	Attached Properties:		- Separating walls and floors only exist between non habitable spaces	<input type="radio"/>	- Separating walls and floors exist between habitable spaces	<input checked="" type="radio"/>	Performance standard not sought	<input type="radio"/>	Airborne: 3db higher; Impact: 3dB lower	<input type="radio"/>	OR Airborne: 5db higher; Impact: 5dB lower	<input checked="" type="radio"/>	OR Airborne: 8db higher; Impact: 8dB lower	<input type="radio"/>	3 of 4 Credits	-	5dB achieves 3 credits, 8dB achieves 4 credits.	
Detached Property	<input type="radio"/>																				
Attached Properties:																					
- Separating walls and floors only exist between non habitable spaces	<input type="radio"/>																				
- Separating walls and floors exist between habitable spaces	<input checked="" type="radio"/>																				
Performance standard not sought	<input type="radio"/>																				
Airborne: 3db higher; Impact: 3dB lower	<input type="radio"/>																				
OR Airborne: 5db higher; Impact: 5dB lower	<input checked="" type="radio"/>																				
OR Airborne: 8db higher; Impact: 8dB lower	<input type="radio"/>																				

Issue		Credits	Level	Assumptions Made	Evidence Required
Hea 3 Private Space	<p>A credit is awarded for the provision of an outdoor space that is at least partially private. The space must allow easy access to all occupants.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Will a private/ semi-private space be provided? _____</p> <p>Yes, private/semi-private space will be provided <input checked="" type="radio"/></p> <p>OR No private/semi-private space <input type="radio"/></p> </div>	1 of 1 Credits	-		
Hea 4 Lifetime Homes	<p><u>Mandatory Requirement:</u> Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6.</p> <p><u>Tradable credits:</u> Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes scheme.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Mandatory Requirement _____</p> <p>Dwelling to achieve Code Level 6? <input type="checkbox"/></p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>Lifetime Homes Compliance _____</p> <p>All Lifetime Homes criteria will be met <input checked="" type="radio"/></p> <p>OR Exemption from LTH criteria 2/3 applied <input type="radio"/></p> <p>Credit not sought <input type="radio"/></p> </div>	4 of 4 Credits	No level	Each apartment would have to meet the 16 criteria necessary to achieve a Lifetime Homes certificate.	

CATEGORY 8 MANAGEMENT		Overall Level: 4	Overall Score: 70.86		Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 100.00%			Credits: 9 of 9 Credits	Level: All Levels	
Contribution to Overall Score: 10.00 points					
Man 1 Home User Guide	<p>Credits are awarded where a simple guide is provided to each dwelling covering information relevant to the 'non-technical' home occupier, in accordance with the Code requirements.</p> <p>Tick the topics covered by the Home User Guide</p> <p>Operational Issues? <input checked="" type="checkbox"/></p> <p>Site and Surroundings? <input checked="" type="checkbox"/></p> <p>Is available in alternative formats? <input checked="" type="checkbox"/></p>	3 of 3 Credits	-		
Man 2 Considerate Constructors Scheme	<p>Credits are awarded where there is a commitment to comply with best practice site management principles using either the Considerate Constructors Scheme or an alternative locally/nationally recognised scheme.</p> <p>Select the appropriate scheme and score</p> <p>No scheme used <input type="radio"/></p> <p>Considerate Constructors <input type="radio"/></p> <p>OR Best Practice: Score between 24 and 31.5 <input type="radio"/></p> <p>OR Best Practice+: Score between 32 and 40 <input checked="" type="radio"/></p> <p>Alternative Scheme* <input type="radio"/></p> <p>OR Mandatory + 50% optional requirements <input type="radio"/></p> <p>OR Mandatory + 80% optional requirements <input type="radio"/></p> <p>* In the first instance, contact a Code Service Provider if you are considering to use an alternative scheme.</p>	2 of 2 Credits	-	The Considerate Constructor Scheme changed on 1 January 2013. a score of 35 out of 50 with a minimum score of 7 in each category is required to achieve 2 credits. Typically this is achievable.	
Man 3 Construction Site Impacts	<p>Credits are awarded where there is a commitment and strategy to operate site management procedures on site as following:</p> <p>Tick the impacts that will be addressed</p> <p>Monitor, report and set targets, where applicable, for:</p> <p>- CO<sub>2</sub>/ energy use from site activities <input checked="" type="checkbox"/></p> <p>- CO<sub>2</sub>/ energy use from site related transport <input type="checkbox"/></p> <p>- water consumption from site activities <input type="checkbox"/></p> <p>Adopt best practice policies in respect of:</p> <p>- air (dust) pollution from site activities <input checked="" type="checkbox"/></p> <p>- water (ground and surface) pollution on site <input checked="" type="checkbox"/></p> <p>80% of site timber is reclaimed, re-used or responsibly sourced <input checked="" type="checkbox"/></p>	2 of 2 Credits	-	Contractor has to commit to do 4 out of the 6 requirements to achieve 2 credits. Typically achievable.	

Issue	Credits	Level	Assumptions Made	Evidence Required	
Man 4 Security	<p>Credits are awarded for complying with Section 2 - Physical Security from Secured by Design - New Homes. An Architectural Liaison Officer (ALO), or alternative, needs to be appointed early in the design process and their recommendations incorporated.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Secured by Design Compliance</p> <p style="text-align: right;">○</p> <p>Credit not sought</p> <p>OR Secured by Design Section 2 Compliance <input checked="" type="radio"/></p> </div>	<p>2 of 2 Credits</p>	<p>-</p>	<p>Secure by Design principles to be met. As a minimum, will each apartment only needs to meet section 2 of the Secure by Design scheme.</p>	



CATEGORY 9 ECOLOGY		Overall Level: 4	Overall Score	70.86		Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 55.00%			Credits	Level	Assumptions Made	
Contribution to Overall Score: 6.66 points			5 of 9 Credits	All Levels		
Eco 1 Ecological Value of Site	<p>One credit is awarded for developing land of inherently low value.</p> <p>Select the appropriate option</p> <p>Credit not sought <input type="radio"/></p> <p>OR Land has ecological value <input checked="" type="radio"/></p> <p>OR Land has low/ insignificant ecological value* <input type="radio"/></p> <p>* Low ecological value is determined either a) by using Checklist Eco 1 across the whole development site; or b) where an suitably qualified ecologist is appointed and can confirm or c) produces an independent ecological report of the site, that the construction zone is of low/ insignificant value; AND the rest of the development site will remain undisturbed by the works.</p>	0 of 1 Credits	-	Trees greater than 1m high or with trunks greater than 100mm diameter will classify the land as being of ecological value so the credit can't be claimed.		
Eco 2 Ecological Enhancement	<p>A credit is awarded where there is a commitment to enhance the ecological value of the development site.</p> <p>Tick the appropriate boxes</p> <p>Will a <i>Suitably Qualified Ecologist</i> be appointed to recommend appropriate ecological features? <input checked="" type="checkbox"/></p> <p>AND Will all key recommendations be adopted? <input checked="" type="checkbox"/></p> <p>AND 30% of other recommendations be adopted? <input checked="" type="checkbox"/></p>	1 of 1 Credits	-	Requires the appointment of a suitably qualified ecologist, who, are a fairly cheap way to achieve credits. I have assumed one will be appointed and their recommendations will be followed.		
Eco 3 Protection of Ecological Features	<p>A credit is awarded where there is a commitment to maintain and adequately protect features of ecological value.</p> <p>Type and protection of existing features</p> <p>Site with features of ecological value? <input checked="" type="radio"/></p> <p>OR Site of low ecological value (as Eco 1)? <input type="radio"/></p> <p>AND All* existing features potentially affected by site works are maintained and adequately protected? <input type="checkbox"/></p> <p>*If a suitably qualified ecologist has confirmed that a feature can be removed due to insignificant ecological value or poor health conditions, as long all the rest have been protected, then this box can be ticked.</p>	0 of 1 Credits	-	The removal or re-location of any ecological feature (tree) will make this credit unobtainable unless it can be proved the tree was diseased or was a danger to the public.		

Issue	Credits	Level	Assumptions Made	Evidence Required	
Eco 4 Change of Ecological Value of Site	Credits are awarded where the change in ecological value has been calculated in accordance with the Code requirements and is calculated to be: Change in Ecological Value Major negative change: fewer than -9 <input type="radio"/> Minor negative change: between -9 and -3 <input type="radio"/> OR Neutral: between -3 and +3 <input type="radio"/> Minor enhancement: between +3 and +9 <input checked="" type="radio"/> Major enhancement: greater than 9 <input type="radio"/>	3 of 4 Credits	-	A neutral impact and two credits is typical. An ecologist may be able to achieve an additional credit.	
Eco 5 Building Footprint	Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is: Ratio of Net Internal Floor Area: Net Internal Ground Floor Area Credit Not Sought <input type="radio"/> OR Houses: 2.5:1 OR Flats: 3:1 <input checked="" type="radio"/> OR Houses: 3:1 OR Flats: 4:1 <input type="radio"/> OR Houses & Flats Weighted (2.5:1 & 3:1) <input type="radio"/> OR Houses & Flats Weighted (3:1 & 4:1) <input type="radio"/>	1 of 2 Credits		The credit cannot be achieved in Block B & C. 1 credit probably achievable in Block A.	

**BREEAM 2011 New Construction Pre-Assessment Estimator**

This assessment and indicative BREEAM rating is not a formal certified BREEAM assessment or rating and must not be communicated as such. The score presented is indicative of a buildings potential performance and is based on a simplified pre-formal BREEAM assessment and unverified commitments given at an early stage in the design process.

Building name	St Paul's School - Block B
Indicative building score (%)	72.58%
Indicative BREEAM rating	Pre-Assessment result indicates potential for BREEAM Excellent rating
Indicative minimum standards level achieved	Pre-Assessment result indicates the minimum standards for Excellent level

<b>MANAGEMENT</b>	<b>Section Weighting</b>	<b>12.00%</b>	<b>Indicative Section Score</b>	<b>9.27%</b>
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**Man01 Sustainable Procurement**

No. of BREEAM credits available	8	Available contribution to overall score	4.36%
No. of BREEAM Innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will roles, responsibilities and a training schedule be defined in accordance with BREEAM?	Yes	1	1
Will a BREEAM AP be appointed at RIBA stage A/B and performance targets contractually agreed?	No	1	0
Will a BREEAM AP be appointed to monitor and report progress during RIBA stage B-E?	No	1	0
Will a BREEAM AP be appointed to monitor and report progress during RIBA stage F-I?	Yes	1	1
Will a thermographic survey be conducted and any defects uncovered remedied?	Yes	1	1
Will compliant commissioning of building services be carried out?	Yes	1	1
Will compliant seasonal commissioning of building services be carried out?	Yes	1	1
Will water/energy consumption data be recorded and aftercare support provided for 12 months?	Yes	1	1
Will water/energy consumption be recorded/reported for 3 years post construction?	Yes	1	1

Total indicative BREEAM credits achieved	6
Total indicative contribution to overall building score	3.27%
Total indicative BREEAM innovation credits achieved	1
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

**Man02 Responsible Construction Practices**

No. of BREEAM credits available	2	Available contribution to overall score	1.09%
No. of BREEAM Innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response
Which considerate construction scheme will be used or required to be used by the principal contractor?	Considerate Constructors Scheme
For the required scheme, what will be the target performance level set for the site/contractor?	A CCS score of 36 or more

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.09%
Total indicative BREEAM innovation credits achieved	1
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

**Man03 Construction Site Impacts**

No. of BREEAM credits available	5	Available contribution to overall score	2.73%
No. of BREEAM Innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will site energy consumption be metered/monitored?	Yes	1	1
Will site water consumption be metered/monitored?	Yes	1	1
Will the transport of construction materials and waste to/from site be measured/monitored?	Yes	1	1
Will timber be sourced in accordance with the Government's Timber Procurement Policy?	Yes	1	1
Will/does the principal contractor operate a compliant Environmental Management System?	Yes	1	1
Will the principal contractor adopt best practice pollution prevention policies & procedures?	Yes	1	1

Total indicative BREEAM credits achieved	5
Total indicative contribution to overall building score	2.73%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**BREEAM 2011 New Construction Pre-Assessment Estimator**

**Man04 Stakeholder Participation**

No. of BREEAM credits available	4	Available contribution to overall score	2.18%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will an appropriate level of consultation activities be undertaken?	Yes	1	1
Will an access statement be developed and appropriate building user facilities provided?	Yes	1	1
Will building user guides and relevant user information be provided?	Yes	1	1
Will a post occupancy evaluation assessment be undertaken and information disseminated?	Yes	1	1

Total indicative BREEAM credits achieved	4
Total indicative contribution to overall building score	2.18%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

**Man05 Life cycle cost and service life planning**

No. of BREEAM credits available	3	Available contribution to overall score	1.64%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will a feasibility stage Life Cycle Cost (LCC) analysis be commissioned and completed?	No	1	0
Will a strategic and system level LCC be commissioned and completed?	No	1	0
Will a technical design LCC to be commissioned and completed?	No	1	0

Total indicative BREEAM credits achieved	0
Total indicative contribution to overall building score	0.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**HEALTH & WELLBEING**      Section Weighting    15.00%      Indicative Section Score    12.19%

**Hea01 Visual Comfort**

No. of BREEAM credits available	3	Available contribution to overall score	2.81%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will all fluorescent lamps be fitted with high frequency ballasts?	Yes	N/A	N/A
Will all relevant building areas be designed to achieve the appropriate daylight factor(s)?	Yes	1	1
Will the design provide adequate glare control and view out for building users?	Yes	1	1
Will internal/external lighting be specified in accordance with the relevant CIBSE Guides/British Standards?	Yes	1	1
Will all relevant building areas be designed to achieve exemplary level daylight factor(s)?	No	1	0

Total indicative BREEAM credits achieved	3
Total indicative contribution to overall building score	2.81%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

**BREEAM 2011 New Construction Pre-Assessment Estimator**

**Hea02 Indoor Air Quality**

No. of BREEAM credits available	4	Available contribution to overall score	3.75%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will an air quality plan be produced?	Yes	1	0
Will the building be designed to minimise sources of internal air pollution?			
Will the relevant products be specified to meet the VOC testing and emission levels required?	Yes	1	1
Will formaldehyde and total VOC levels be measured post construction?	Yes	1	1
Will the building be designed to, or have the potential to provide, natural ventilation?	Yes	1	1

Total indicative BREEAM credits achieved	3
Total indicative contribution to overall building score	2.81%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**Hea03 Thermal Comfort**

No. of BREEAM credits available	2	Available contribution to overall score	1.88%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will thermal modelling of the design be carried out?	Yes	1	1
Will the modelling inform the development of a thermal zoning and control strategy?	Yes	1	1

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.88%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**Hea04 Water Quality**

No. of BREEAM credits available	1	Available contribution to overall score	0.94%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will all water systems be designed to comply with the relevant HSE Approved Code of Practice and Guidance?	Yes	1	1
Where humidification is to be provided, will a fail-safe humidification system be specified?	Yes		
Will a wholesome supply of accessible, clean and fresh drinking water be supplied for building users?	Yes		

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.94%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

**Hea05 Acoustic Performance**

No. of BREEAM credits available	4	Available contribution to overall score	3.75%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will/has a suitably qualified acoustician be appointed to provide appropriate design advice?	Yes	4	3
Will the building meet the relevant acoustic performance standards and testing requirements?	Yes		

Total indicative BREEAM credits achieved	3
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**BREEAM 2011 New Construction Pre-Assessment Estimator**

Total indicative contribution to overall building score	2.81%
Total indicative BREEAM Innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

Airborne & Impact Sound in individual bedrooms & self contained flats to be 5dB beyond Part E 2010 requirements.

**Hea06 Safety and Security**

No. of BREEAM credits available	2	Available contribution to overall score	1.85%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria

	Response	Credits available	Indicative credits achieved
Where external site areas are present, will safe access be designed for pedestrians and cyclists?	No	1	0
Will a suitably qualified security consultant be appointed and security considerations accounted for?	Yes	1	1

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.94%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

Secure by Design and Secure Parking schemes requirements to be met.

<b>ENERGY</b>	<b>Section Weighting</b>	<b>19.00%</b>	<b>Indicative Section Score</b>	<b>11.96%</b>
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**Ene01 Reduction of CO<sub>2</sub> Emissions**

No. of BREEAM credits available	15	Available contribution to overall score	10.56%
No. of BREEAM innovation credits available	5	Minimum standards applicable	Yes

How do you wish to assess the number of BREEAM credits achieved for this issue?	Define a target number of BREEAM credits achieved
Select the target number of BREEAM credits for the Ene01 issue	7 BREEAM Innovation credits

Ene01 Calculator

Ene01 Calculator and Key Performance Indicators

Indicator	Value	Unit	Target	Pass	Self & Core credits?
Building floor area	122	m <sup>2</sup>	122	Yes	N/A
National building energy demand	121/102/100/100	MJ/m <sup>2</sup> /annum			
Actual building energy demand	121/102/100/100	MJ/m <sup>2</sup> /annum			
National building energy consumption	121/102/100/100	kWh/m <sup>2</sup> /annum			
Actual building energy consumption	121/102/100/100	kWh/m <sup>2</sup> /annum			
Target Emission Rate (TER)	121/102/100/100	kgCO <sub>2</sub> /m <sup>2</sup> /annum			
Building Emission Rate (BER)	121/102/100/100	kgCO <sub>2</sub> /m <sup>2</sup> /annum			
Building improvement over TER					
Greenfield Energy Performance Ratio (EPN)	0.0000				
Construction Energy Performance Ratio (CER)	0.0000				
CO <sub>2</sub> Energy Performance Ratio (EPR)	0.0000				
Overall Building Energy Performance Ratio (EBPR)	0.0000				

What is the anticipated % of the building's regulated energy consumption that will be generated by on-site renewable sources and used to meet energy demand from "regulated" building systems or processes?  
Is the building designed to be carbon negative?

Total indicative BREEAM credits achieved	7
Total indicative contribution to overall building score	4.93%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Excellent level

Comments/notes:

A minimum of 6 credits is mandatory for an Excellent rating based on Primary Energy Consumption. A minimum Building Emission Rate of 25% improvement over the target Emission rate is required. The self contained flats are not included in the calculations as they will be assessed using SAP 2009 and not SBEM.

**Ene02 Energy Monitoring**

No. of BREEAM credits available	1	Available contribution to overall score	0.70%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

**BREEAM 2011 New Construction Pre-Assessment Estimator**

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will a BMS or sub-meters be specified to monitor energy use from major building services systems?	Yes	1	1
Will a BMS or sub-meters be specified to monitor energy use by tenant/building function areas?		N/A	N/A
<b>Total indicative BREEAM credits achieved</b>		<b>1</b>	
<b>Total indicative contribution to overall building score</b>		<b>0.70%</b>	
<b>Total indicative BREEAM innovation credits achieved</b>		<b>N/A</b>	
<b>Indicative minimum standard(s) level</b>	Pre-Assessment result indicates the minimum standards for Outstanding level		

Comments/notes:

Assume a BMS system will be installed to enable energy use by residents to be individually metered.

**Ene03 External Lighting**

No. of BREEAM credits available	1	Available contribution to overall score	0.70%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will external light fittings and controls be specified in accordance with the BREEAM criteria?	Yes	1	1
<b>Total indicative BREEAM credits achieved</b>		<b>1</b>	
<b>Total indicative contribution to overall building score</b>		<b>0.70%</b>	
<b>Total indicative BREEAM innovation credits achieved</b>		<b>N/A</b>	
<b>Indicative minimum standard(s) level</b>		<b>N/A</b>	

Comments/notes:

For buildings with self-contained dwellings also being assessed under the Code for Sustainable Homes (CSH), the following applies:

Where the external space lighting credit for issue Ene 6 of the CSH has been achieved, the credit available for issue Ene 03 of the Multi-residential scheme is also achieved for the same external areas. Any external space lighting outside of the scope of CSH issue Ene 6, but within the wider scope of the Multi-Residential scheme, must comply with the requirements of either CSH issue Ene 6 or BREEAM issue Ene 03 to achieve the credit.

CSH Ene 6 is targeted.

**Ene04 Low and Zero Carbon Technology**

No. of BREEAM credits available	5	Available contribution to overall score	3.52%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Compliant LZC feasibility study to be undertaken	Yes	2	2
What will be the intended scope of the feasibility study?	Whole life cycle carbon savings/emissions		
Target percentage net reduction in whole life cycle CO2 emissions	10.00%	2	1
Please confirm the intended energy source of the Low and/or zero carbon system?	Combination of one or more LZC energy sources		
Building is cooled mechanically, not utilising 'free' cooling	No	1	0
<b>Total indicative BREEAM credits achieved</b>		<b>3</b>	
<b>Total indicative contribution to overall building score</b>		<b>2.11%</b>	
<b>Total indicative BREEAM innovation credits achieved</b>		<b>0</b>	
<b>Indicative minimum standard(s) level</b>	Pre-Assessment result indicates the minimum standards for Outstanding level		

Comments/notes:

**Ene05 Energy Efficient Cold Storage**

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
		1	0
		1	0
		1	0
<b>Total indicative BREEAM credits achieved</b>		<b>N/A</b>	
<b>Total indicative contribution to overall building score</b>		<b>N/A</b>	
<b>Total indicative BREEAM innovation credits achieved</b>		<b>N/A</b>	
<b>Indicative minimum standard(s) level</b>		<b>N/A</b>	

Comments/notes:

**BREEAM 2011 New Construction Pre-Assessment Estimator**

**Ene06 Energy Efficient Transportation Systems**

No. of BREEAM credits available	2	Available contribution to overall score	1.41%
No. of BREEAM innovation credits available	0	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will a transportation system analysis be carried out to determine the optimum number and size of lifts?	Yes	1	1
Will three energy-efficient features offering the greatest potential energy savings be part of the system?	Yes	1	1

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.41%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**Ene07 Energy Efficient Laboratory Systems**

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
	No	N/A	N/A
	N/A	FALSE	N/A

Total indicative BREEAM credits achieved	N/A
Total indicative contribution to overall building score	N/A
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**Ene08 Energy Efficient Equipment**

No. of BREEAM credits available	2	Available contribution to overall score	1.41%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Present	Significant majority contributor
Which of the following will be present and likely to be a/the major contributor to 'unregulated' energy use:		
Small power/plug in equipment?	Yes	Yes
Swimming pool?	No	No
Communal laundry?	Yes	Yes
Data centre?	No	No
IT-intensive operation areas?	No	No
Residential areas?	Yes	Yes
Healthcare?	No	No
Kitchen and catering facilities?	Yes	No

Pre-Assessment question/criteria	Indicative compliance?	Credits available	Indicative credits achieved
Will the significant majority contributor(s) to 'unregulated' energy use (above) meet the BREEAM criteria?	Yes	2	2

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.41%
Total indicative BREEAM innovation credits achieved	N/A



**BREEAM 2011 New Construction Pre-Assessment Estimator**

Indicative minimum standard(s) level N/A

Comments/notes:

**Ene09 Drying Space**

No. of BREEAM credits available	1	Available contribution to overall score	0.70%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will internal/external drying space and fixings be provided?	Yes	1	1
Total indicative BREEAM credits achieved		1	
Total indicative contribution to overall building score		0.70%	
Total indicative BREEAM innovation credits achieved		N/A	
Indicative minimum standard(s) level		N/A	

Comments/notes:

**TRANSPORT** Section Weighting 8.00% Indicative Section Score 5.33%

**Tra01 Public Transport Accessibility**

No. of BREEAM credits available	3	Available contribution to overall score	2.67%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
What is the building type category (for the purpose of Tra01 issue assessment)?	Multi-Residential Accommodation		
What is the degree of public transport provision for the building's location?	Good provision of public transport i.e. small urban centre / suburban area		
Building's indicative Accessibility Index	8		
Does the building have a dedicated bus service?	No		
Total indicative BREEAM credits achieved		3	
Total indicative contribution to overall building score		2.67%	
Total indicative BREEAM innovation credits achieved		N/A	
Indicative minimum standard(s) level		N/A	

Comments/notes:

Current PTAL score of 2 translates to an AI of 8.08.

**Tra02 Proximity to Amenities**

No. of BREEAM credits available	2	Available contribution to overall score	1.78%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will the building be in close proximity of and accessible to applicable amenities?	Yes	2	1
Total indicative BREEAM credits achieved		1	
Total indicative contribution to overall building score		0.89%	
Total indicative BREEAM innovation credits achieved		N/A	
Indicative minimum standard(s) level		N/A	

Comments/notes:

**Tra03 Cyclist facilities**

No. of BREEAM credits available	1	Available contribution to overall score	0.89%
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**BREEAM 2011 New Construction Pre-Assessment Estimator**

No. of BREEAM Innovation credits available	0	Minimum standards applicable	No
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What is the building type category (for the purpose of Tra03 issue assessment)?

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will cycle storage spaces be provided?	Yes	1	1

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.89%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**Tra04 Maximum Car Parking Capacity**

No. of BREEAM credits available	2	Available contribution to overall score	1.78%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Building type category (for the purpose of Tra04 issue)?   
 Buildings indicative Accessibility Index (sourced from issue Tra01)

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will the building meet BREEAM's maximum parking capacity criteria for this building type/Accessibility Index?	No	2	0

Total indicative BREEAM credits achieved	0
Total indicative contribution to overall building score	0.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

Compliance assessed on the basis of parking capacity for the whole development, accounting for all existing and new users and parking spaces.

Assuming 1 car per single bed and 2 cars per 2 or 3 bed apartment. 22 studio/ study bedrooms / 1 bed apartments and 11 2 & 3 bed apartments

Currently 25 car parking spaces are shown. Currently there too many car parking spaces.

**Tra05 Travel Plan**

No. of BREEAM credits available	1	Available contribution to overall score	0.89%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will a transport plan based on site specific travel survey/assessment be developed?	Yes	1	1

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.89%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**WATER** Section Weighting 6.00% Indicative Section Score 4.67%

**Wat01 Water Consumption**

No. of BREEAM credits available	5	Available contribution to overall score	3.33%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Select the level that corresponds closely to the target or likely water component specification?

Total indicative BREEAM credits achieved	3
Total indicative contribution to overall building score	2.00%
Total indicative BREEAM innovation credits achieved	0

**BREEAM 2011 New Construction Pre-Assessment Estimator**

Indicative minimum standard(s) level: Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

A minimum of 1 credit is mandatory for an Excellent rating

**Wat02 Water Monitoring**

No. of BREEAM credits available	1	Available contribution to overall score	0.67%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Pre-Assessment question/criteria

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will there be a water meter on the mains water supply to the building(s)?	Yes	1	1
Will metering/monitoring equipment be specified on the water supply to any relevant plant/building areas?	Yes		
Will all specified water meters have a pulsed output?	Yes		
If the site/building has an existing BMS connection, will all pulsed meters be connected to the BMS?	Yes		

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.67%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

1 x water meter per building

**Wat03 Water Leak Detection and Prevention**

No. of BREEAM credits available	2	Available contribution to overall score	1.33%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will a mains water leak detection system be installed on the building's mains water supply?	Yes	1	1
Will flow control devices be installed in each sanitary area/facility?	Yes	1	1

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.33%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**Wat04 Water Efficient Equipment**

No. of BREEAM credits available	1	Available contribution to overall score	0.67%
No. of BREEAM innovation credits available	No	Minimum standards applicable	No

Pre-Assessment question/criteria

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will water efficient irrigation methods and/or vehicle wash systems (if relevant) be installed?	Yes	1	1

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.67%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

<b>MATERIALS</b>	Section Weighting	12.50%	Indicative Section Score	7.69%
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**Mat01 Life Cycle Impacts**

No. of BREEAM credits available	6	Available contribution to overall score	5.77%
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**BREEAM 2011 New Construction Pre-Assessment Estimator**

No. of BREEAM Innovation credits available	1	Minimum standards applicable	No
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Pre-Assessment question/criteria

How do you wish to assess the number of BREEAM credits achieved for this issue?	Define a target number of BREEAM credits to be achieved		
Select the number of BREEAM credits being targeted for the Mat01 issue	2	BREEAM Innovation credits	

For each element below, please confirm if it is present on the building assessed and where present, confirm whether or not it will be responsible / sourced and the responsible sourcing tier level			
Building elements	Element present / responsible / sourced	Responsible / sourced	Responsible / sourcing tier level
External Walls			
Roof			
Windows			
Upper floor slab			
Floor finishes / coverings			
Internal walls			

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.92%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	N/A

Comments/notes:

**Mat02 Hard Landscaping and Boundary Protection**

No. of BREEAM credits available	1	Available contribution to overall score	0.96%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria

Will ≥80% of all external hard landscaping and boundary protection achieve a Green Guide A or A+ rating?	Response	Credits available	Indicative credits achieved
	Yes	1	1

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	0.96%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**Mat03 Responsible Sourcing**

No. of BREEAM credits available	3	Available contribution to overall score	2.88%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria

How do you wish to assess the number of BREEAM credits achieved for this issue?	Define a target number of BREEAM credits		
Select the number of BREEAM credits being targeted for the Mat03 issue	2	BREEAM Innovation credits	0
Will all timber used on the project be sourced in accordance with the UK Gov't's Timber Procurement Policy?	Yes		

Building elements	Element present / responsible / sourced	Responsible / sourced	Responsible / sourcing tier level
Structural Frame			
Ground floor			
Upper floors (including separating floors)			
Roof			
External walls			
Internal walls			
Foundations/substructure			
Fittings			
Hard landscaping			

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.92%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

**BREEAM 2011 New Construction Pre-Assessment Estimator**

**Mat04 Insulation**

No. of BREEAM credits available	2	Available contribution to overall score	1.92%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Indicative	
		Credits available	credits achieved
Is the building targeting an insulating index of 2 or more?	Yes	1	1
Will the building's insulating materials be responsibly sourced?	Yes	1	1
<b>Total indicative BREEAM credits achieved</b>		<b>2</b>	
<b>Total indicative contribution to overall building score</b>		<b>1.92%</b>	
<b>Total indicative BREEAM innovation credits achieved</b>		<b>N/A</b>	
<b>Indicative minimum standard(s) level</b>		<b>N/A</b>	

Comments/notes:

**Mat05 Designing for Robustness**

No. of BREEAM credits available	1	Available contribution to overall score	0.96%
No. of BREEAM innovation credits available	0	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Indicative	
		Credits available	credits achieved
Will suitable durability/protection measures be specified and installed to vulnerable areas of the building?	Yes	1	1
<b>Total indicative BREEAM credits achieved</b>		<b>1</b>	
<b>Total indicative contribution to overall building score</b>		<b>0.96%</b>	
<b>Total indicative BREEAM innovation credits achieved</b>		<b>N/A</b>	
<b>Indicative minimum standard(s) level</b>		<b>N/A</b>	

Comments/notes:

**WASTE Section Weighting 7.50% Indicative Section Score 5.00%**

**Wst01 Construction Waste Management**

No. of BREEAM credits available	4	Available contribution to overall score	5.00%
No. of BREEAM innovation credits available	1	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Define a target number of BREEAM credits to be achieved	
	3	BREEAM innovation credits
How do you wish to assess the number of BREEAM credits achieved for this issue?		
Select the number of BREEAM credits being targeted for the Wst01 issue	3	BREEAM innovation credits
Will a compliant Site Waste Management Plan be produced?	Yes/No	
Will a compliant waste transfer note be completed (if not applicable select N/A)?	Yes/No	
What type of measure is the site's construction waste rate is?	0% - 100%	
How is garden refuse/waste (excluding demolition excavations)?	0% - 100%	
How is garden refuse/waste (excluding demolition excavations)?	0% - 100%	
How is garden refuse/waste (excluding demolition excavations)?	0% - 100%	
How is garden refuse/waste (excluding demolition excavations)?	0% - 100%	
<b>Total indicative BREEAM credits achieved</b>	<b>3</b>	
<b>Total indicative contribution to overall building score</b>	<b>3.75%</b>	
<b>Total indicative BREEAM innovation credits achieved</b>	<b>0</b>	
<b>Indicative minimum standard(s) level</b>	<b>Pre-Assessment result indicates the minimum standards for Outstanding level</b>	

Comments/notes:

**Wst02 Recycled Aggregates**

No. of BREEAM credits available	1	Available contribution to overall score	1.25%
No. of BREEAM innovation credits available	1	Minimum standards applicable	No

Pre-Assessment question/criteria	Define a target number of BREEAM credits to be achieved	
	0	BREEAM innovation credits
How do you wish to assess the number of BREEAM credits achieved for this issue?		
Select the number of BREEAM credits being targeted for the Wst02 issue	0	BREEAM innovation credits

**BREEAM 2011 New Construction Pre-Assessment Estimator**

Please confirm the target total % of high-grade aggregates that will be recycled/secondary aggregate

For each applicable application below confirm the % of high-grade aggregate that is recycled/secondary aggregate

Structural frame	
Floor slabs including ground floor slabs	
Basement/underpinning bound base, column and mortar courses	
Concrete road surfaces	
Hard landscaping	
Building footings	
Granular fill and capping	
Gravel landscaping	

Total indicative BREEAM credits achieved	0
Total indicative contribution to overall building score	0.00%
Total indicative BREEAM innovation credits achieved	0
Indicative minimum standard(s) level	N/A

Comments/notes:

**Wst03 Operational Waste**

No. of BREEAM credits available	1	Available contribution to overall score	1.25%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will appropriate facilities for the storage of operational recyclable waste volumes be provided?	Yes	1	1
If relevant, will a static waste compactor(s) or baler(s) be specified/installed?	N/A		
If relevant, will a vessel for composting suitable organic waste be specified/installed?	N/A		
Will internal and, if applicable, communal storage & home compost facilities be provided?	Yes		

Total indicative BREEAM credits achieved	1
Total indicative contribution to overall building score	1.25%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

**Wst04 Speculative Floor and Ceiling Finishes**

Assessment Issue Not Applicable

No. of BREEAM credits available	N/A	Available contribution to overall score	N/A
No. of BREEAM innovation credits available	N/A	Minimum standards applicable	N/A

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
	N/A	N/A	0

Total indicative BREEAM credits achieved	N/A
Total indicative contribution to overall building score	N/A
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**LAND USE & ECOLOGY**      Section Weighting **10.00%**      Indicative Section Score **6.00%**

**LE01 Site Selection**

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will at least 75% of the proposed development's footprint be located on previously been developed land?		1	0
Is the site deemed to be significantly contaminated?		1	0

Total indicative BREEAM credits achieved	0
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**BREEAM 2011 New Construction Pre-Assessment Estimator**

Total indicative contribution to overall building score	0.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**LE02 Ecological Value of Site and Protection of Ecological Features**

No. of BREEAM credits available	1	Available contribution to overall score	1.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Can the land within the construction zone be defined as 'land of low ecological value'?	No	1	0
Will all features of ecological value surrounding the construction zone/site boundary be protected?	Yes		
Total indicative BREEAM credits achieved	0		
Total indicative contribution to overall building score	0.00%		
Total indicative BREEAM innovation credits achieved	N/A		
Indicative minimum standard(s) level	N/A		

Comments/notes:

**LE03 Mitigating Ecological Impact**

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	Yes

Pre-Assessment question/criteria	Response
What is the likely change in ecological value (plant species richness) as a result of the sites development?	No negative change or improvement in plant species richness
Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	2.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	Pre-Assessment result indicates the minimum standards for Outstanding level

Comments/notes:

**LE04 Enhancing Site Ecology**

No. of BREEAM credits available	3	Available contribution to overall score	3.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will a suitably qualified ecologist be appointed to report on enhancing and protecting site ecology?	Yes	3	2
Will the suitably qualified ecologists general recommendations be implemented?	Yes		
What is the targeted/intended improvement in ecological value as a result of enhancement actions?	Small improvement in plant species richness		
Total indicative BREEAM credits achieved	2		
Total indicative contribution to overall building score	2.00%		
Total indicative BREEAM innovation credits achieved	N/A		
Indicative minimum standard(s) level	N/A		

Comments/notes:

**LE05 Long Term Impact on Biodiversity**

No. of BREEAM credits available	2	Available contribution to overall score	2.00%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

**BREEAM 2011 New Construction Pre-Assessment Estimator**

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will the building meet BREEAM's mandatory criteria for this BREEAM issue?	Yes	2	2
Will a Biodiversity Champion be appointed to monitor/minimise impacts of site activities on biodiversity?	Yes		
Will the contractor provide training for the site workforce on how to protect ecology during the project?	Yes		
Will the contractor record actions to protect biodiversity and monitor their effectiveness during construction?	Yes		
Will a new ecologically valuable habitat, appropriate to the local area, be created?	Yes		
Where flora/fauna habitats exist on site, will the contractor programme site works to minimise disturbance?	Yes		

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	2.00%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**POLLUTION** Section Weighting 10.00% Indicative Section Score 8.46%

**Pol01 Impact of Refrigerants**

No. of BREEAM credits available	3	Available contribution to overall score	2.31%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
Will refrigerant containing systems be installed in the assessed building?	Yes	2	2
Is the Global Warming Potential of the specified refrigerant(s) likely to be 10 or less?	Yes		
What is the target range Direct Effect Life Cycle CO <sub>2</sub> e emissions for the system?		kgCO <sub>2</sub> e/kW coolth capacity	
Will a refrigerant leak detection and containment system be specified/installed?	No	1	0

Total indicative BREEAM credits achieved	2
Total indicative contribution to overall building score	1.54%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**Pol02 NO<sub>x</sub> Emissions**

No. of BREEAM credits available	3	Available contribution to overall score	2.31%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	
Please enter the target/maximum NO <sub>x</sub> emission level for space heating system	40.00	mg/kWh
Please enter the target/maximum NO <sub>x</sub> emission level for the water heating system	40	mg/kWh

Total indicative BREEAM credits achieved	3
Total indicative contribution to overall building score	2.31%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**Pol03 Surface Water Run off**

No. of BREEAM credits available	5	Available contribution to overall score	3.85%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved
What is the actual/likely annual probability of flooding for the assessed site?	Low	2	2
Will a compliant Flood Risk Assessment be undertaken?	Yes		
Will the site meet the BREEAM criteria for peak rate surface water run off?	Yes	1	1
Will the site meet the criteria for surface water run off volume, attenuation and/or limiting discharge?	No	1	0
Will the site be designed to minimise watercourse pollution in accordance with the BREEAM criteria?	Yes	1	1



**BREEAM 2011 New Construction Pre-Assessment Estimator**

Total indicative BREEAM credits achieved	4
Total indicative contribution to overall building score	3.08%
Total indicative BREEAM innovation credits achieved	N/A
Indicative minimum standard(s) level	N/A

Comments/notes:

**Pol04 Reduction of Night Time Light Pollution**

No. of BREEAM credits available	1	Available contribution to overall score	0.77%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved								
Will the external lighting be designed to reduce light pollution?	Yes	1	1								
<table border="1"> <tr> <td>Total indicative BREEAM credits achieved</td> <td>1</td> </tr> <tr> <td>Total indicative contribution to overall building score</td> <td>0.77%</td> </tr> <tr> <td>Total indicative BREEAM innovation credits achieved</td> <td>N/A</td> </tr> <tr> <td>Indicative minimum standard(s) level</td> <td>N/A</td> </tr> </table>				Total indicative BREEAM credits achieved	1	Total indicative contribution to overall building score	0.77%	Total indicative BREEAM innovation credits achieved	N/A	Indicative minimum standard(s) level	N/A
Total indicative BREEAM credits achieved	1										
Total indicative contribution to overall building score	0.77%										
Total indicative BREEAM innovation credits achieved	N/A										
Indicative minimum standard(s) level	N/A										

Comments/notes:

**Pol05 Noise Attenuation**

No. of BREEAM credits available	1	Available contribution to overall score	0.77%
No. of BREEAM innovation credits available	0	Minimum standards applicable	No

Pre-Assessment question/criteria	Response	Credits available	Indicative credits achieved								
Will there be, or is there noise-sensitive areas/buildings within 800m radius of the development? Will a noise impact assessment be completed and, if applicable, noise attenuation measures specified?	Yes	1	1								
<table border="1"> <tr> <td>Total indicative BREEAM credits achieved</td> <td>1</td> </tr> <tr> <td>Total indicative contribution to overall building score</td> <td>0.77%</td> </tr> <tr> <td>Total indicative BREEAM innovation credits achieved</td> <td>N/A</td> </tr> <tr> <td>Indicative minimum standard(s) level</td> <td>N/A</td> </tr> </table>				Total indicative BREEAM credits achieved	1	Total indicative contribution to overall building score	0.77%	Total indicative BREEAM innovation credits achieved	N/A	Indicative minimum standard(s) level	N/A
Total indicative BREEAM credits achieved	1										
Total indicative contribution to overall building score	0.77%										
Total indicative BREEAM innovation credits achieved	N/A										
Indicative minimum standard(s) level	N/A										

Comments/notes:

**INNOVATION Section Weighting 10.00% Indicative Section Score 2.00%**

**Inn01 Innovation**

No. of BREEAM innovation credits available	10	Available contribution to overall score	10.00%
		Minimum standards applicable	No

Pre-Assessment question/criteria	Exemplary level achieved	Credits available	Indicative credits achieved						
Man01 Sustainable Procurement	Yes	1	1						
Man02 Responsible Construction Practices	Yes	1	1						
Head01 Visual Comfort	No	1	0						
Ene01 Reduction of CO2 Emissions	No	5	0						
Ene04 Low and Zero Carbon Technology	No	1	0						
Ene05 Energy Efficient Cold Storage	N/A	N/A	N/A						
Wat01 Water Consumption	No	1	0						
Mat01 Life Cycle Impacts	No	1	0						
Mat03 Responsible Sourcing of Materials	No	1	0						
Wat01 Construction Waste Management	No	1	0						
Wat02 Recycled Aggregates	No	1	0						
<table border="1"> <tr> <td>Total indicative BREEAM credits achieved</td> <td>2</td> </tr> <tr> <td>Total indicative contribution to overall building score</td> <td>2.00%</td> </tr> <tr> <td>Indicative minimum standard(s) level</td> <td>N/A</td> </tr> </table>				Total indicative BREEAM credits achieved	2	Total indicative contribution to overall building score	2.00%	Indicative minimum standard(s) level	N/A
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Comments/notes:

BREEAM 2011 New Construction Pre-Assessment Estimator

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