

M.O. ASSOCIATES

**CODE FOR SUSTAINABLE HOMES
PRE-ASSESSMENT REPORT FOR**

**70, Churchway, Camden
London NW1 1LT**

Prepared for

D Form Architecture
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**Project No.: 13704
Document No.: 001**



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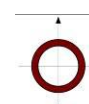
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1.0 Code for Sustainable Homes Pre-Assessment

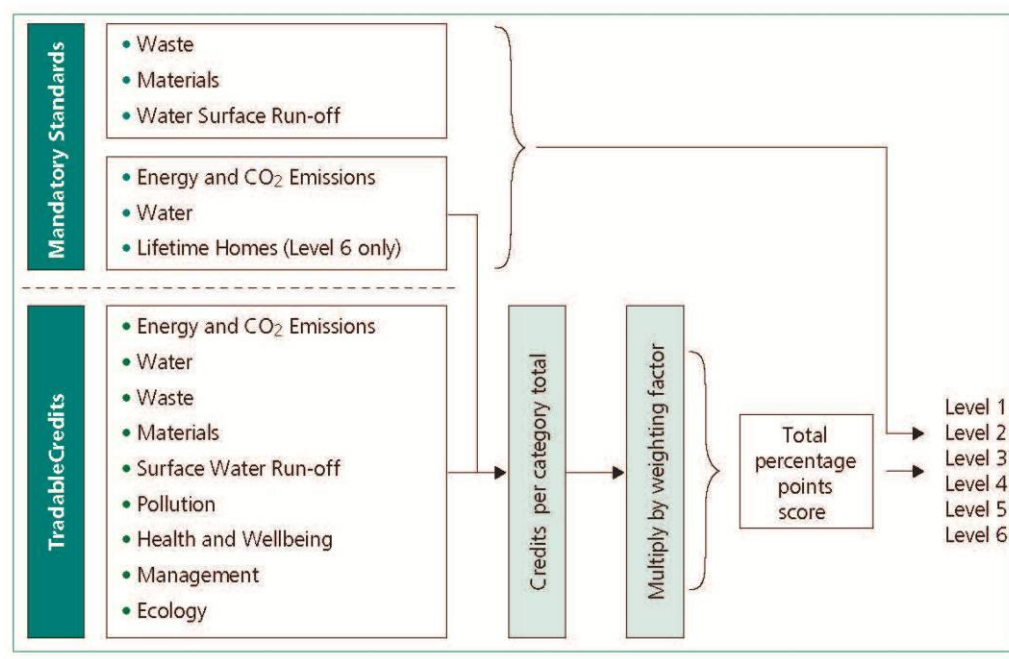
1.1 Introduction

This is a pre-assessment estimate of Code for Sustainable Homes (CfSH) Level for the proposed development of a 4-storey building incorporating basement to third floors, each floor incorporating one and two bedroom flats (Refer; to architect's drawings for details of layouts) at 70, Churchway, Camden London NW1 1LT..

The development has been assessed against the Code for Sustainable Homes, Nov 2010 technical guidance. The scoring against each Code level 4 is required for the development. This report confirms that the current proposals, (energy strategy, architectural specifications etc), Level 4 will be achievable.

1.2 Achieving Code Level 4

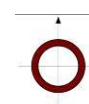
A set of Mandatory Standards must be achieved within five sections and along with a number of Tradable Credits from any of the nine categories for each level. Code Level 4; the Mandatory Standards must be met with an additional percentage of Tradable Credits so that a minimum of 68 % is achieved. The scoring process is demonstrated below:



1.3 Summary of performance

A summary of the predicted credits that the dwelling will score in each category of the Code for Sustainable Homes is shown below. The dwelling aims to achieve Code Level 4 and can expect to score 69.97%. This score is therefore sufficient at the pre-assessment stage of the project. Further design and development could promote an increase in the final score.

A breakdown of the score in each category is provided below.
 Predicted percentage of credits achievable: Total and by Category:

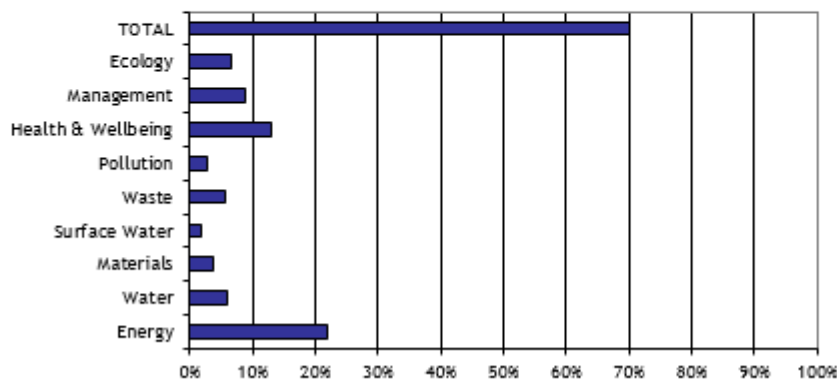


PREDICTED RATING - CODE LEVEL: 4

Mandatory Requirements All Levels

% Points: 69.97% - 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

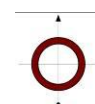


1.4 Energy

With regards to the Code for Sustainable Homes, the following credits can be achieved in the corresponding categories:

The energy strategy being proposed and has been confirmed from SAP calculation to exceed code level 4 mandatory requirement to comply with Building regulations part L1A 2010 Target emissions rate. The proposed energy study is attached at the end of this document and the developer needs to ensure that the details included here is utilised.

issue	Comments
Ene 1 [Dwelling Emission Rate]	4.7 credits are predicted based on a 40.75 % improvement of the Dwelling Emission Rate (DER) over the Target Emission Rate (TER). SAP 2009 has been used to calculate rates and compliance with building regulations is assumed.
Ene 2 [Fabric Energy Efficiency] -	3.1 credits are awarded as the Fabric energy efficiency is 47.79 kWh/m ² /year; resulting from SAP calculations (the limiting values are to be between 38 and 60 kWh/m ² /year).
Ene 3 [Energy Display Devices] -	Energy display device to be provided from electricity and primary heating fuel providers, therefore 2 credits are assumed.
Ene 4 [Drying Space] –	Internal or external drying space is assumed will be provided.
Ene 5 [Energy Labelled White Goods]	Only provision of EU Energy Labelling Scheme leaflets can be assumed at this stage and 1 credit awarded.



Ene 6 [External Lighting] –	Any external lighting will be supplied with the compliant sensors and timer controls.
Ene 7 [Low or Zero Carbon Technologies] –	A 27.6 % reduction in CO ₂ emissions is predicted will be achieved. Low or zero carbon technologies are being considered where possible. 2 credit can be achieved.
Ene 8 [Cycle Storage] –	1 Credit is awarded for cycle storage. Secure and weather proof cycle storage will be provided in accordance with the Code requirements..
Ene 9 [Home Office] –	One bedroom in two bedroom flats can be used as an office. On this occasion no credits awarded.

1.5 Water

Water Saving

Although not a direct energy saving, reducing cold water consumption will provide an indirect energy saving as treatment of water to drinking water standards is an expensive and energy intensive process. In addition it will reduce demand on already stretched water resources.

In addition reducing hot water consumption provides a direct energy saving as less water has to be heated.

Water saving measures to be considered includes:

- Use of low flush or dual flush toilets
- Use of water saving white goods
- Use of aerated spray taps where appropriate.

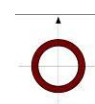
In addition the feasibility of incorporating water recycling into scheme will be considered particularly for watering the garden areas.

With regards to the Code for Sustainable Homes, the following credits can be achieved in the corresponding categories:

Wat 1 [Indoor Water Use]	It is assumed that the average water consumption for this development will be 104.53 litres per person per day. This is calculated using the Water Calculator Tool. 3 credits can therefore be achieved.
Wat 2 [External Water Use]	Full credit can be awarded for specifying a compliant system for collecting rainwater for external irrigation. As mentioned, a water recycling system will be considered particularly for watering the garden area.

1.6 Materials

- **Mat 1** [Environmental Impact of Materials]



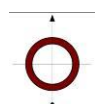
The aim of this mandatory category is to specify materials with a lower environmental impact over their life-cycle. The category is assessed using the Green Guide Rating, where at least three of the five building elements must achieve a rating of A+ to D.

Credits are awarded as follows:

A+ =	3 credits
A =	2 credits
B =	1 credit
C =	0.5 credit
D =	0.25 credit

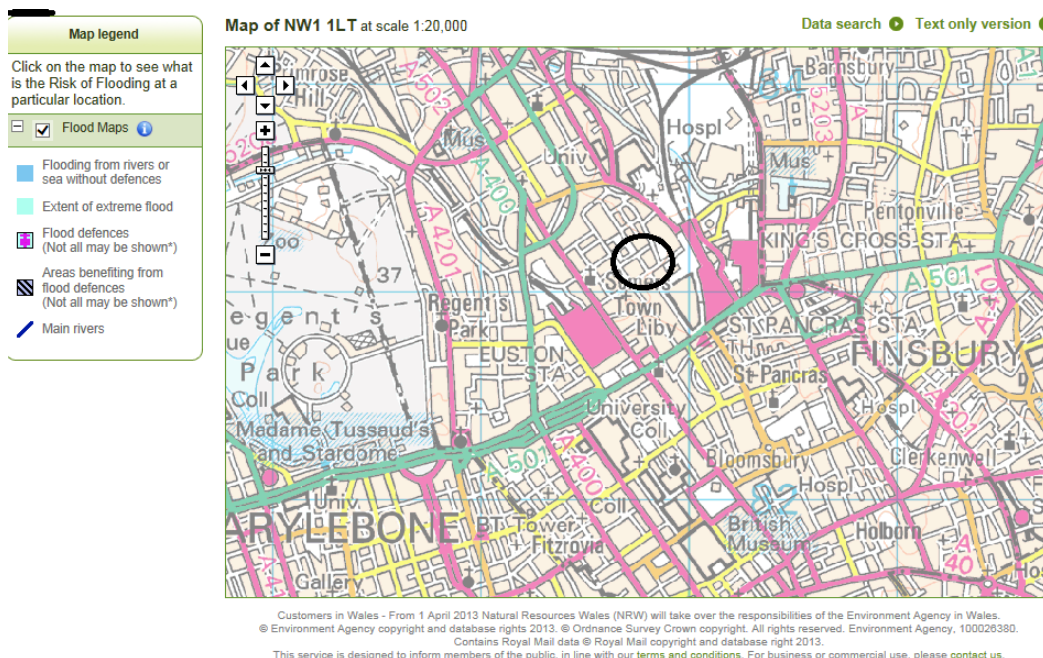
Based on the type of construction, 6 of a possible 15 credits can be assumed.

- **Mat 2** [Responsible Sourcing of Materials – Basic Building Elements] – 4 out of a possible 6 credits can be predicted here based on assumptions made from the EMS certificates. Credits are awarded for responsibly sourcing materials that are used in the basic building elements.
- **Mat 3** [Responsible Sourcing of Materials – Finishing Elements] – 2 out of a possible 3 credits are predicted based on assumptions made from the EMS certificates. Finishing elements must consist of responsibly sourced materials to be awarded credits.



1.7 Surface Water Run-Off

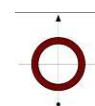
According to the Environment Agency, the site is at low risk of flooding. The Flood Map is shown below:



- **Sur 1** [Management of Surface Water Run-off from developments] – The mandatory requirement is for the peak rate of run-off into watercourses to be no more for the developed site than is was previously and that the additional predicted volume of rainwater discharge caused by the new development is reduced as much as possible in line with the assessment criteria. The drainage system should also be designed to cope with any local drainage system failure. These mandatory requirements are assumed to be met. A flood risk assessment on required though.
- **Sur 2** [Flood Risk] – Full credits are awarded assuming that the site is in a low flood risk area (as demonstrated by the above map), a flood risk assessment is still required here.

1.8 Waste

- **Was 1** [Storage of non-recyclable waste and recyclable household waste] – The mandatory requirement is for space to be provided for waste storage that is of a size to hold larger of either all external containers provided by the Local Authority or the minimum capacity calculated from BS 5906. This space must also be accessible to disabled people. Full recycling credits are also predicted here, assuming that Camden Council collection scheme will provide pre-collection sorting with internal storage.



- **Was 2** [Construction and Site Waste Management] – 2 credits are predicted assuming that a site waste management plan is implemented to divert 50% of waste generated from landfill.
- **Was 3** [Composting] – Full credits are awarded assuming that Camden Council will provide a composting bin.

1.9 Pollution

- **Pol 1** [Global Warming Potential (GWP) of Insulants] – Full credits can be awarded assuming that all insulants (both in manufacture and installation) will have a GWP of less than 5.
- **Pol 2** [NOx Emissions] – Full credits are predicted assuming that the boiler will have low NOx emissions of less than 40 mg/kWh.

1.10 Health and Wellbeing

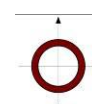
- **Hea 1** [Daylighting] – Credits are awarded here for ensuring that key spaces receive high daylight factors and a view of the sky. It can be assumed that 2 of the 3 credits can be awarded providing that daylight calculations are presented. Daylight factors should be as follows:

Room	Average Daylight Factor
Kitchen	≥ 2%
Living Room	≥ 1.5%
Dining Room	≥ 1.5%
Study	≥ 1.5%

- **Hea 2** [Sound Insulation] – At least 3 of 4 credits are predicted assuming that there are separating walls and floors between habitable spaces and that there is an improvement over Building Regulations Part E for both airborne and impact sound attenuation; where airborne sound is 3db higher and impact sound is 3db lower. This may be demonstrated through pre-completion testing or through the use of Robust Details Limited.
- **Hea 3** [Private Space] – Full credits are awarded for providing private outdoor space in the form of gardens.
- **Hea 4** [Lifetime Homes] – Full credits are awarded assuming that the Lifetime Homes criteria is met.

1.11 Management

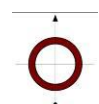
- **Man 1** [Home User Guide] – Full credits are awarded assuming that a home user guide (available in alternative formats) covering operational issues, site and surroundings will be supplied to the end user.
- **Man 2** [Considerate Constructors Scheme] – No scheme used. If necessary a contractor can be used under the scheme. If this is the case than a score of 32 will be achieved using the Considerate Constructors Scheme, therefore achieving the full two credits.



- **Man 3** [Construction Site Impacts] – Full credits are predicted assuming that energy and water consumption will be monitored during construction and best practice procedures will be applied to dust and water pollution.
- **Man 4** [Security] – Full credits are predicted assuming that that Section 2 (Physical Security) from Secured by Design will be complied with. An Architectural Liaison Officer (or alternative) will need to be consulted early in the design process and any recommendations considered.

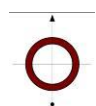
1.12 Ecology

- **Eco 1** [Ecological Value of Site] – No credit awarded.
- **Eco 2** [Ecological Enhancement] – Full credits are awarded providing a qualified ecologist is consulted and any recommendations are incorporated.
- **Eco 3** [Protection of Ecological Features] – Full credits can be awarded assuming the site is of low ecological value. A qualified ecologist will need to be consulted to provide an ecology report.
- **Eco 4** [Change of Ecological Value of Site] – 2 of the 4 credits can be predicted assuming that the change in ecological value of the site will be neutral ie. between -3 and +3. A qualified ecologist will need to be consulted to provide an ecology report. The value should be calculated in accordance with the Code requirements.
- **Eco 5** [Building Footprint] – There must be evidence of efficient use of the building's footprint. 1 of 2 credits is predicted assuming the ratio of Net Internal Floor Area to Net Internal Ground Floor Area will be 2.5:1. The dwelling is 4 storeys and has a total internal floor area of 302.03 m² and a ground floor area of 62.4m².



Code for sustainable homes – pre-assessment

2.0 Code for Sustainable Homes Preliminary Score Sheet





Code for Sustainable Homes Pre Assessment Estimator Tool

This tool is distributed freely to customers and associates of BRE Global. If you experience problems or have questions relating to this tool please contact

csh@bre.co.uk

Background

Full Code for Sustainable Homes Technical Guidance can be downloaded from the Code for Sustainable Homes webpage at <http://www.communities.gov.uk/publications/planningandbuilding/codeguide>

Introduction

The pre-assessment estimator tool allows an evaluation of the potential rating achievable under a formal Code for Sustainable Homes assessment for a single dwelling.

Several dwellings on the same site may achieve different levels and scores. Where designs show any changes in the way credits will be achieved, a new copy of the pre-assessment estimator should be used to indicate the possible score for each dwelling (or set of dwellings sharing exactly the same specifications).

Instructions

1.0 Open the tool and save a working document

- 1.1 The CSH Pre Assessment Estimator Tool can be downloaded by licensed assessors from the Code for Sustainable Homes folder of the BREEAM Extranet (www.breeam.org/extranet).
- 1.2 After downloading the file, open it and use the 'Save As' function of Excel to save the file in a location and with a name which clearly identifies it as being the CSH Pre Assessment Estimator Tool for the development and plots within that development that are being assessed.

2.0 Entering the basic details and generic instructions

- 2.1 Click on the 'Results' tab and enter details of the:
 - 'Development Name'
 - 'Dwelling Description'

Save the file.

- 2.2 Generic instructions
 - Always read and follow indications that are in the text associated to each issue
 - The Code Technical Guide specifications always supersede the ones presented in this tool
 - Confirm that all the mandatory requirements have been met and that all the issues related to these are properly filled in, or the tool will not provide adequate assessments

3.0 Entering the details required to pre assess the performance for a dwelling

- 3.1 For each of the Code Categories (identified in each of the tabs) work through the issues indicating the score or the options who are applicable and that you think will be achieved based on the information you have available for the development being pre assessed and the Code technical Guide requirements.
- 3.2 Where there is a calculator tool that can be used to determine credits eg Ene, Wat, Mat, Pol, Eco, mention the tool explaining that it can be used to calculate a predicted score to input into the Pre

Assessment Estimator.

- 3.3 For the mandatory requirements make sure that all applicable boxes have been ticked including predicted water and energy consumptions
- 3.4 Save the file at least everytime one of the category tabs have been filled in and a changing of tabs is to occur

4.0 Understanding the spreadsheet headlines in each tab

- 4.1 In each tab headline there are 7 type of information displayed:
 - a) Category name
 - b) Attained Overall Level for the whole assessment
 - c) Attained Overall Score for the whole assessment
 - d) % of Section Credits Predicted: achievable credits within the current category
 - e) Contribution of the Category achievable credits to Overall Score
 - f) Credits: achievable credits of the category's available ones
 - g) Level: level attained in the current category

5.0 Understanding and using the results

- 5.1 Click on the 'RESULTS' tab of the tool.
- 5.1 The overall Code Level Rating appears in 'PREDICTED RATING - CODE LEVEL:', below there is information on what if the mandatory requirements have or not being met. Next the % of attained points and again the overall code level for the dwelling. Last the breakdown in water and energy
- 5.2 In Graph 1 it is possible to view the individual contribution of each section to the overall score. Helps the assessor to identify areas that are scoring better and worst and therefore may need special interventions to raise credits and the overall rating.
- 5.3 In Graph 2 it is possible for the assessor to see how well a issue is scoring and how far is it from it's total possible score. This allows to predict areas which need to have more interventions to enhance scores.

Don't forget to save your work when closing this spreadsheet!

Version	Date Added to Assessor Extranet	Changes Made
Rev00	22/11/2010	First issue for Code November 2010 version launch.
Rev01	29/11/2010	Corrected scoring with minimum mandatory standards and other text changes.
Rev02	08/02/2011	Code level and minimum mandatory requirements not correct for Ene1, Ene2 and Hea4. Re-adjusted print margins on all sheets. Protection parameters changed to enable assessors to change formatting on the "Evidence required" column.
Rev03	28/02/2011	Data validation for ENE 2 corrected. Code levels corrected for ENE1 and ENE2. Functionality of ENE1 changed so if zero emissions is selected only 10 credits can be awarded.
Rev04	03/05/2011	Corrected point scoring for Ene 6.
Rev04.1	15/07/2011	Results tab: Corrected function where Code level is calculated based on % points on Results tab. Error message previously appeared when 36 or 57% points were achieved; this has now been corrected.
Rev05	16/02/2012	Previously showed 2 credits when A+ fridge/freezer and EU labelling were selected which was incorrect. Added more options for clarity and enabled option-box-disabling when options are not applicable.



Results

Development Name:	70 Churchway, London NW1 1LT
Dwelling Description:	Mid terrace block of flats
Name of Company:	MO Associates
Code Assessor's Name:	
Company Address:	12 Melcombe Place, London, NW1 6JJ
Notes/Comments:	

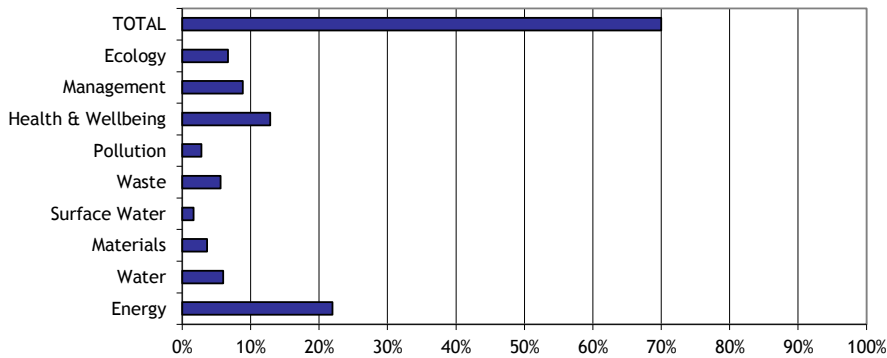
PREDICTED RATING - CODE LEVEL: 4

Mandatory Requirements: All Levels

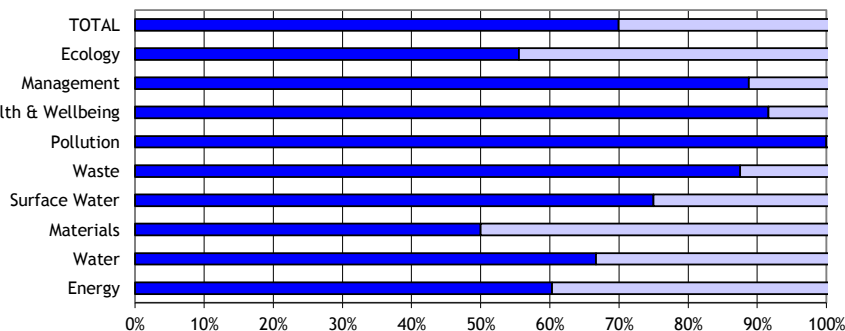
% Points: 69.97% - Code Level: 4

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.

CATEGORY 1 ENERGY		Overall Level: 4	Overall Score 69.97		Evidence Required
% of Section Credits Predicted: 60.32		Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if required.)
Contribution to Overall % Score: 21.95 points		18.7 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="4.7"/></p> <p>OR Are zero net CO₂ emissions achieved? <input type="checkbox"/></p>	4.7 of 10 Credits	Level 4	Assumed building regulation compliance from sap calculations	
Ene 2 Fabric Energy Efficiency	<p>Credits are awarded based on the Fabric Energy Efficiency (kWh/m²/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="3.0"/></p>	3.0 of 9 Credits	-	3 credits assumed for the fabric efficiency resulting from sap calculations to at least be between 48 and 60 kWh/m2/year	
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	-	Energy display device to be provided from both electricity and gas providers	

Issue	Credits	Level	Assumptions Made	Evidence Required
Ene 4 Drying Space	<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> <div style="border: 1px solid black; padding: 5px;"> <p>Yes <input checked="" type="radio"/></p> <p>OR No <input type="radio"/></p> </div>	1 of 1 Credits	-	Assumed provisions for internal or external drying space
Ene 5 Energy Labelled White Goods	<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> <div style="border: 1px solid black; padding: 5px;"> <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> </div>	2 of 2 Credits	-	Only EU Energy Labelling Scheme leaflet assumed, no white goods provided
Ene 6 External Lighting	<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> <div style="border: 1px solid black; padding: 5px;"> <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> </div> <p>Security Lighting _____</p> <div style="border: 1px solid black; padding: 5px;"> <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> </div> <p>Dual lamp luminaires _____</p> <div style="border: 1px solid black; padding: 5px;"> <p>Compliant with both above criteria <input checked="" type="checkbox"/></p> </div> <p>* Statutory safety lighting is not covered by this requirement</p>	2 of 2 Credits	-	Assumed external lighting will be supplied with compliant sensor / timer control.

Issue	Credits	Level	Assumptions Made	Evidence Required
<p>Ene 7 Low or Zero Carbon Technologies</p>	<p>Credits are awarded where there is a 10% or 15% reduction in CO₂ 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>	<p>2 of 2 Credits</p>	<p>-</p>	<p>36.5% reduction in CO₂ emissions predicted to be achieved. PV installation to provide 1 kWp energy is utilised.</p>
<p>Ene 8 Cycle Storage</p>	<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" value="5"/></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>	<p>1 of 2 Credits</p>	<p>-</p>	<p>Assumed provision of external cycle storage</p>
<p>Ene 9 Home Office</p>	<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?</p> <p>Yes <input checked="" type="radio"/></p> <p>OR No <input type="radio"/></p>	<p>1 of 1 Credits</p>	<p>-</p>	<p>Provision of home office on first floor</p>

CATEGORY 2 WATER		Overall Level: 4	Overall Score 69.97		
% of Section Credits Predicted: 66.66		Credits	Level	Assumptions Made	Evidence Required
Contribution to Overall Score: 6.00 points		4 of 6 Credits	Level 4		(The below cells can be formatted by assessors if required.)
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> <p>greater than 120 litres/ person/ day <input type="radio"/></p> <p>OR ≤ less than 120 litres/ person/ day <input type="radio"/></p> <p>OR ≤ less than 110 litres/ person/ day <input type="radio"/></p> <p>OR ≤ less than 105 litres/ person/ day <input checked="" type="radio"/></p> <p>OR ≤ less than 90 litres/ person/ day <input type="radio"/></p> <p>OR ≤ less than 80 litres/ person/ day <input type="radio"/></p>	3 of 5 Credits	Level 3 AND Level 4	Assumed 105 litres per person per day will be achieved	
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> <p>No internal or communal outdoor space <input type="radio"/></p> <p>OR Outdoor space with collection system <input checked="" type="radio"/></p> <p>OR Outdoor space without collection system <input type="radio"/></p>	1 of 1 Credits	-	Water recycling scheme will be considered particularly for watering the garden areas	

CATEGORY 3 MATERIALS		Overall Level: 4	Overall Score 69.97		
% 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: 3.60 points		12 of 24 Credits	All Levels		
Mat 1 Environmental Impact of Materials	<p>Mandatory Requirement: At least three of the five key building elements must achieve a Green Guide 2008 Rating of A+ to D.</p> <p>Tradable Credits: 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 _____</p> <p>Will the mandatory requirement be met? <input checked="" type="checkbox"/></p> <p>Enter the predicted score _____</p> <p>What is the predicted number of credits? <input type="text" value="6"/></p>	6 of 15 Credits	All Levels	Based on type of construction, points assumed as a result from the BRE greenguide rating	
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 _____</p> <p>What is the predicted number of credits? <input type="text" value="4"/></p>	4 of 6 Credits	-	Assumptions made based on EMS certificates	
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 _____</p> <p>What is the predicted number of credits? <input type="text" value="2"/></p>	2 of 3 Credits	-	Assumptions made based on EMS certificates	

CATEGORY 4 SURFACE WATER RUN-OFF		Overall Level: 4	Overall Score 69.97		
% of Section Credits Predicted: 75.00%		Credits	Level	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
Contribution to Overall Score: 1.65 points		3 of 4 Credits	All Levels		
Sur 1 Management of Surface Water Run-off from developments	<p>Mandatory Requirement: 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. Tradable Credits: 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 _____</p> <p>Will the mandatory requirement be met? <input checked="" type="checkbox"/></p> <p>Select the appropriate option _____</p> <p>No SUDS <input 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 checked="" type="checkbox"/></p>	1 of 2 Credits	All Levels	Assumed mandatory requirements are met, flood risk assessment required	
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*) _____</p> <p>Zone 1 - Low <input checked="" type="radio"/></p> <p>OR Zone 2 - Medium <input type="radio"/></p> <p>OR Zone 3 - High <input type="radio"/></p> <p>Select the appropriate option(s) _____</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	-	Assumed site is in a low flood risk area according to The Environment Agency flood risk map, flood risk assessment required	
<p>* Planning Policy Statement 25 - Planning and Flood Risk</p> <p>** FRA - Flood Risk Assessment</p>					

CATEGORY 5 WASTE		Overall Level: 4	Overall Score 69.97		
% of Section Credits Predicted: 87.00%		Credits		Level	
Contribution to Overall Score: 5.60 points		7 of 8 Credits		All Levels	
		Assumptions Made		Evidence Required (The below cells can be formatted by assessors if required.)	
Was 1 Storage of non-recyclable waste and recyclable household waste	<p>Mandatory Requirement: 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</p> <p>Internal storage (capacity 30 litres) <input type="checkbox"/></p> <p>Pre-collection sorting</p> <p>Internal storage (3 separate bins, capacity 30 litres) <input checked="" 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>AND</p> <p>Houses</p> <p>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	Full recycling credits assumed

Issue	Credits	Level	Assumptions Made	Evidence Required
<p>Was 2 Construction Site Waste Management</p>	<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> <p>SWMP details</p> <div style="border: 1px solid black; padding: 5px;"> <p>Does the SWMP include:</p> <p>+ No SWMP <input type="radio"/></p> <p>+ SWMP with targets and procedures to minimise waste? <input type="radio"/></p> <p>+ SWMP with procedures to divert 50% of waste <input checked="" type="radio"/></p> <p>+ SWMP with procedures to divert 85% of waste <input type="radio"/></p> </div> <p style="text-align: center;">2 of 3 Credits</p>		<p>Assumed a swmp will be implemented</p>	
<p>Was 3 Composting</p>	<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> <p>Select the facilities available</p> <div style="border: 1px solid black; padding: 5px;"> <p>No composting facilities <input type="radio"/></p> <p>Individual composting facilities <input type="radio"/></p> <p>OR Communal/ community composting*? <input checked="" type="radio"/></p> <p style="padding-left: 20px;">Local Authority <input checked="" type="checkbox"/></p> <p style="padding-left: 20px;">OR Private with management plan <input type="checkbox"/></p> </div> <p style="text-align: center;">1 of 1 Credit</p>	-	<p>Assumed Enfield Council will provide a composting bin</p>	

* including if an automated waste collection system is in place

CATEGORY 6 POLLUTION		Overall Level: 4	Overall Score 69.97		
% of Section Credits Predicted: 100.00%		Credits	Level	Assumptions Made	Evidence Required
Contribution to Overall Score: 2.80 points		4 of 4 Credits	All Levels		(The below cells can be formatted by assessors if required.)
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	-	Assumed all insulants will have a GWP of 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	-	Boiler assumed to have low Nox emissions of less than 40mg/kWh	

CATEGORY 7 HEALTH & WELLBEING		Overall Level: 4	Overall Score 69.97		
% of Section Credits Predicted: 91.00%		Credits 11 of 12 Credits		Level	
Contribution to Overall Score: 12.83 points				No level	
				Assumptions Made	Evidence Required (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> <div style="border: 1px solid black; padding: 5px;"> <p><u>Room</u></p> <p>Kitchen: Avg DF of at least 2% <input checked="" type="checkbox"/></p> <p>Living Room*: Avg DF of at least 1.5% <input checked="" type="checkbox"/></p> <p>Dining Room*: Avg DF of at least 1.5% <input checked="" type="checkbox"/></p> <p>Study*: Avg DF of at least 1.5% <input checked="" type="checkbox"/></p> <p>80% of working plane in all above rooms receive direct light from the sky? <input checked="" type="checkbox"/></p> </div> <p>Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.</p>	3 of 3 Credits	-	Assumed 2 credits for daylight calculations, which need to be provided	
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> <div style="border: 1px solid black; padding: 5px;"> <p>Detached Property <input type="radio"/></p> <p>Attached Properties:</p> <ul style="list-style-type: none"> - 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"/> </div> <p>Select a performance standard</p> <div style="border: 1px solid black; padding: 5px;"> <p>Performance standard not sought <input type="radio"/></p> <p>Airborne: 3db higher; Impact: 3dB lower <input type="radio"/></p> <p>OR Airborne: 5db higher; Impact: 5dB lower <input checked="" type="radio"/></p> <p>OR Airborne: 8db higher; Impact: 8dB lower <input type="radio"/></p> </div>	3 of 4 Credits	-	1 credit is assumed, as is a 3db improvement over building regulations	

Issue	Credits	Level	Assumptions Made	Evidence Required
<p>Hea 3 Private Space</p> <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> <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>	1 of 1 Credits	-	Private outdoor space will be provided in form of gardens	
<p>Hea 4 Lifetime Homes</p> <p>Mandatory Requirement: Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6.</p> <p>Tradable credits: Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes scheme.</p> <p>Mandatory Requirement _____</p> <p>Dwelling to achieve Code Level 6? <input type="checkbox"/></p> <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>	4 of 4 Credits	No level	Assumed Lifetime Homes criteria will be met	

CATEGORY 8 MANAGEMENT		Overall Level: 4	Overall Score 69.97		
% of Section Credits Predicted: 88.00%		Credits	Level	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
Contribution to Overall Score: 8.88 points		8 of 9 Credits	All Levels		
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> <div style="border: 1px solid black; padding: 5px;"> <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> </div>	3 of 3 Credits	-	Assumed a home user guide will be supplied to end user	
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> <div style="border: 1px solid black; padding: 5px;"> <p>No scheme used <input type="radio"/></p> <p><u>Considerate Constructors</u> <input checked="" type="radio"/></p> <p>OR Best Practice: Score between 24 and 31.5 <input checked="" type="radio"/></p> <p>OR Best Practice+: Score between 32 and 40 <input type="radio"/></p> <p><u>Alternative Scheme*</u></p> <p>OR Mandatory + 50% optional requirements <input type="radio"/></p> <p>OR Mandatory + 80% optional requirements <input type="radio"/></p> </div> <p>* In the first instance, contact a Code Service Provider if you are considering to use an alternative scheme.</p>	1 of 2 Credits	-	Assumed a score of 32 will be achieved using the Considerate Constructors Scheme	
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> <div style="border: 1px solid black; padding: 5px;"> <p><u>Monitor, report and set targets, where applicable, for:</u></p> <p>- CO₂/ energy use from site activities <input checked="" type="checkbox"/></p> <p>- CO₂/ energy use from site related transport <input type="checkbox"/></p> <p>- water consumption from site activities <input checked="" type="checkbox"/></p> <p><u>Adopt best practice policies in respect of:</u></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><u>80% of site timber</u> is reclaimed, re-used or responsibly sourced <input type="checkbox"/></p> </div>	2 of 2 Credits	-	Assumed energy and water consumption will be monitored during construction and best practice applied to dust and water pollution	

Issue	Credits	Level	Assumptions Made	Evidence Required
<p>Man 4 Security</p> <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> <p>Secured by Design Compliance _____</p> <p>Credit not sought <input type="radio"/></p> <p>OR Secured by Design Section 2 Compliance <input checked="" type="radio"/></p>	2 of 2 Credits	-	Assumed secured by Design Compliance	

CATEGORY 9 ECOLOGY		Overall Level: 4	Overall Score 69.97		
% of Section Credits Predicted: 55.00%		Credits	Level	Assumptions Made	Evidence Required
Contribution to Overall Score: 6.66 points		5 of 9 Credits	All Levels		(The below cells can be formatted by assessors if required.)
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> <div style="border: 1px solid black; padding: 5px;"> <p>Credit not sought <input checked="" type="radio"/></p> <p>OR Land has ecological value <input type="radio"/></p> <p>OR Land has low/ insignificant ecological value* <input type="radio"/></p> </div> <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	-	Assumed low/insignificant ecological value, a qualified ecologist needs to be consulted to provide ecology report	
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> <div style="border: 1px solid black; padding: 5px;"> <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> </div>	1 of 1 Credits	-	A qualified ecologist needs to be consulted to provide ecology report	
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> <div style="border: 1px solid black; padding: 5px;"> <p>Site with features of ecological value? <input type="radio"/></p> <p>OR Site of low ecological value (as Eco 1)? <input checked="" type="radio"/></p> <p>AND All* existing features potentially affected by site works are maintained and adequately protected? <input type="checkbox"/></p> </div> <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>	1 of 1 Credits	-	A qualified ecologist needs to be consulted to provide ecology report	

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 checked="" type="radio"/> Minor enhancement: between +3 and +9 <input type="radio"/> Major enhancement: greater than 9 <input type="radio"/>	2 of 4 Credits	-	A qualified ecologist needs to be consulted to provide ecology report	
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		Building is 2 storeys and has a combined floor area of 77.04m2 on a footprint of approximately 180m2	