



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

*Site*

**120 KINGSGATE ROAD, LONDON NW6 2AE**

*Proposal*

**ERECTION OF RESIDENTIAL DWELLING**

*Applicant*

**MR D GRAHAM**

9<sup>th</sup> JUNE 2011

Ref. E152-KR-CSHPA-00



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## 1.0 INTRODUCTION

- a) Doherty Design and Planning Limited has been instructed by Mr D Graham to undertake the Code for Sustainable Homes Pre-Assessment for the proposed development of a new dwelling at 120 Kingsgate Road, London, NW6 2AE.
- b) The aim of this review is to give a brief description of the Code for Sustainable Homes Assessment, assess the current specification for the construction of the dwelling and highlight areas of improvement to enable Code Level 3 to be achieved.
- c) In order to carry out the review, an initial review was held with WS Planning and Architecture to gain an understanding of the current specification. In some areas where the specification has not yet been defined, it is necessary to make assumptions that will need to be confirmed prior to the Code Assessment being submitted to the BRE. These assumptions, together with the required specification, have been clearly stated in Appendix A.

## 2.0 INTRODUCTION TO CODE FOR SUSTAINABLE HOMES

- a) The Code for Sustainable Homes (the Code) is an environmental assessment method for rating and certifying the performance of new homes. It is a national standard for use in the design and construction of new homes with a view to encouraging continuous improvements in sustainable home building.
- b) The Code is based on EcoHomes and was launched in December 2006 and became operational in England in April 2007.
- c) From 1<sup>st</sup> May 2008 it is mandatory for a Code Sustainability Certificate or nil rated Certificate (where an assessments has not taken place) to be included in the information provided to prospective purchasers of properties in England. The Code has been revised in November 2010 and this report is based on the November 2010 version.
- d) The Code covers nine categories of sustainable design which are as follows:
  - Energy and CO<sub>2</sub> emissions
  - Water
  - Materials
  - Surface Water Run-off
  - Waste
  - Pollution
  - Health and Wellbeing
  - Management
  - Ecology
- e) Each category includes a number of environmental issues, which are assessed against performance targets for which credits are awarded. The performance targets are more demanding than the minimum standard needed to satisfy Building Regulations or other legislation. They represent good or best practise, are technically feasible and can be delivered by the building industry.

- f) There are mandatory minimum performance standards set for some of the above issues. Four of these have a single mandatory requirement, whatever Code level is sought, however credits are not awarded for these issues.
- g) If the mandatory minimum performance standard is met for these four issues, three further mandatory issues need to be considered. For two of these, credits are awarded for every level of achievement recognised within the Code, and minimum mandatory standards increase with increasing rating levels.
- h) Tables 1.2 and 1.3 below, taken from the Code Technical Guide, illustrate how, for the creditable mandatory issues, the minimum mandatory standards increase with increasing rating levels.

*For CO<sub>2</sub> emissions there are increased mandatory minimum standards for each increase in Code Level.*

Table 1.2: Code Levels for Mandatory Minimum Standards In CO <sub>2</sub> Emissions (Ene 1)	
Code Level	Minimum Percentage Improvement in Dwelling Emission Rate over Target Emission Rate
Level 1 (★)	0% (Compliance with Part L 2010 only is required)
Level 2 (★★)	0% (Compliance with Part L 2010 only is required)
Level 3 (★★★)	0% (Compliance with Part L 2010 only is required)
Level 4 (★★★★)	25%
Level 5 (★★★★★)	100%
Level 6 (★★★★★★)	Net Zero CO <sub>2</sub> Emissions

*For Indoor water use there are increased mandatory minimum standards at Code levels 1, 3 and 5.*

Table 1.3: Code Levels for Mandatory Maximum Standards In Indoor Water Consumption	
Code Level	Maximum Indoor Water Consumption in Litres per Person per Day
Level 1 (★)	120
Level 2 (★★)	120
Level 3 (★★★)	105
Level 4 (★★★★)	105
Level 5 (★★★★★)	80
Level 6 (★★★★★★)	80

- i) In addition to the mandatory standards, each design category scores a number of percentage points. Weighting factors are applied to each category. These have been derived from extensive studies involving a wide range of stakeholders who were asked to rank a range of environmental impacts. The weighting factor is applied to the percentage points which results in the credit for that issue.
- j) Table 1.4 shows how weightings are applied across all Code categories of environmental impact to adjust the relative values of credits within different categories. Within each category, credits are awarded for achieving specified degrees of performance. The weighting factors show the contribution made by each category to the total performance recognised and rewarded by the Code. The total available contribution is expressed as 100 per cent. The weighting of each category is expressed as a fraction of this, such that the sum of all the category contributions equals 100 per cent.

Table 1.4: Total Credits Available, Weighting Factors and Points			
Categories of Environmental Impact	Total Credits in each Category	Weighting Factor (% points contribution)	Approximate Weighted Value of each Credit
<b>Category 1</b> Energy and CO <sub>2</sub> Emissions	31	36.4%	1.17
<b>Category 2</b> Water	6	9.0%	1.50
<b>Category 3</b> Materials	24	7.2%	0.30
<b>Category 4</b> Surface Water Run-off	4	2.2%	0.55
<b>Category 5</b> Waste	8	6.4%	0.80
<b>Category 6</b> Pollution	4	2.8%	0.70
<b>Category 7</b> Health and Well-being	12	14.0%	1.17
<b>Category 8</b> Management	9	10.0%	1.11
<b>Category 9</b> Ecology	9	12.0%	1.33
Total	–	100.0%	–

- k) The total number of credits establishes the Level or Rating for the dwelling. The certificate illustrates the rating achieved with a row of blue stars, one for each level. Where an assessment has taken place and no rating is achieved, the certificate states that no blue stars have been awarded.
- l) Table 1.6 below, taken from the Code Technical Guide, shows the relationship between the Total percentage points score and the Code Level.

Table 1.6: Relationship Between Total Percentage Points Score and Code Level	
Total Percentage Points Score (equal to or greater than)	Code Levels
36 Points	Level 1 (★)
48 Points	Level 2 (★★)
57 Points	Level 3 (★★★)
68 Points	Level 4 (★★★★)
84 Points	Level 5 (★★★★★)
90 Points	Level 6 (★★★★★★)

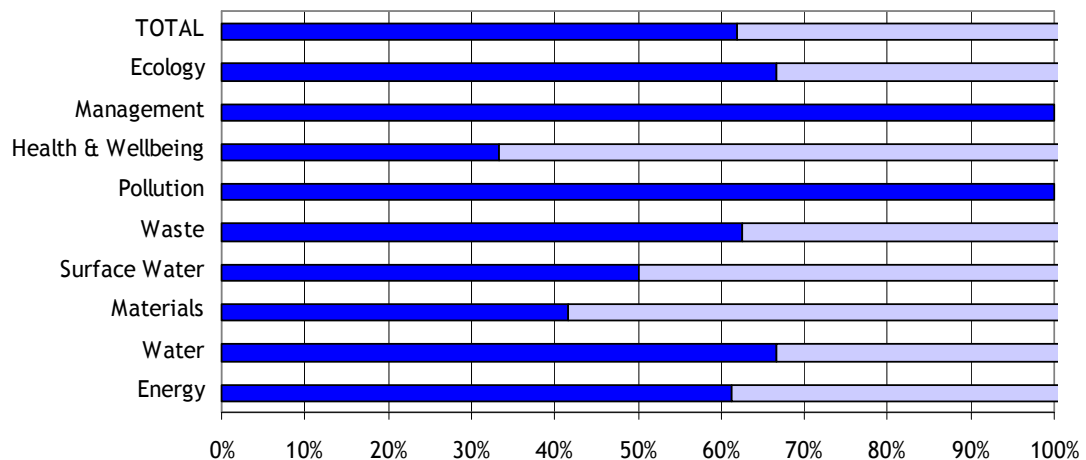
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Tables used in this document are taken from The Code for Sustainable Homes Technical Guide Nov 2010.

### 3.0 IMPROVEMENTS

- a) A Pre Assessment has been carried out for the proposed dwelling and this demonstrates that a Code Level 3 can be achieved if the requirements set out in Appendix A and B are implemented and all the evidence is gathered.
- b) The Assessment shows that the dwelling achieves approximate 61.86% of the Credits. However, during detailed design and construction, care must be taken as it is very easy to lose credits, especially by not gathering and maintaining the evidence. During the project, a natural slippage may occur and it is likely to be in the region of 3-6 credits, therefore, the current of 4.86 credit margin may be adequate.
- c) This report will try to identify any improvements that can be incorporated into all the dwelling to improve their score. Graph 1 shows a break down of the credits for each category and highlights the predicted percentage of their maximum.



Graph 1 – Predicted Percentage of credits achievable - Total and by Category

- d) It must also be remembered that the category's are weighted, as shown in Table 1.4 above and therefore it is not just a simple matter of targeting the lower scored categories, for example materials only achieves 0.3 of a credit.
- e) In order to improve the rating, the more heavily weighted categories should be targeted first, e.g. Energy, Ecology, Water and Health & Well Being.

- f) The dwelling currently has a score of 61.86. The table below shows some possible examples that could be incorporated, together with the revised Credit score if only the individual item is incorporated.

Category	Title	Improvement	New Score
<b>Ene 1</b>	Dwelling Emission Rate	Improve the Insulation, Air tightness etc to achieve a greater reduction in CO <sub>2</sub> emissions 36% improvement – 4 Credits 47% improvement – 5 Credits 59% improvement – 6 Credits 72% improvement – 7 Credits	Current 63.04 64.21 65.39
<b>Ene 2</b>	Fabric Energy Efficiency	Improve the fabric energy efficiency performance thus future proofing reduction in CO <sub>2</sub> for the life of the dwelling ≤ 49 – 6 Credits ≤ 46 – 7 Credits ≤ 42 – 8 Credits	Current 63.04 64.21
<b>Ene 3</b>	Energy Display Devices	Install an Energy Display Device to monitor the electricity and/or primary heating fuel consumption. Electric Only Electricity and Primary heating fuel	Current 63.04
<b>Ene 5</b>	Energy Labeled White Goods	Provide A+ rated fridge/freezers and A rated washing machines and Information Leaflets	63.04
<b>Ene 8</b>	Cycle Storage	Provide 2 cycle storage spaces Provide 4 cycle storage spaces	Current 63.04
<b>Wat 1</b>	Indoor Water Use	Reduce the consumption of potable water in the home by specifying lower water use fittings/appliances or use rainwater harvesting ≤ 105 l/p/day – 3 Credits ≤ 90 l/p/ day – 4 Credits ≤ 80 l/p/ day – 5 Credits	Current 63.36 64.86
<b>Was 2</b>	Construction Site Waste Management	A Site Waste Management Plan is currently being provided, However, if this included procedures to divert waste from landfill, extra credits can be awarded 50% – 1 Credit 85% – 2 Credits	62.66 63.46
<b>Was 3</b>	Home Composting	Provide home composting facilities	62.66
<b>Hea 4</b>	Lifetime Homes	Comply with the all 16 requirements of lifetime homes	66.53
<b>Eco 4</b>	Change in Ecological Value of Site	Incorporate a green roof to create a Minor enhancement (between +3 to +9 new species per hectare) Major enhancement (greater than 9 new species per hectare)	63.19 64.52

**4.0****CONCLUSION**

- a) The report has given a brief description of the Code for Sustainable Homes Assessment, assessed the current specification that is to be used by MR D Graham for the construction of the new dwelling at 120 Kingsgate Road and highlighted areas of improvement to ensure Code Level 3 to be achieved.
- b) Assumptions have been made when the current specification failed to provide adequate information. These assumptions have been clearly stated in Appendix A.
- c) With regard to Ene1 and Ene2, the preliminary SAP assessments show that the current credits can be achieved, however, once the working drawings are produced, these will need to be revisited.
- d) The Code for Sustainable Homes has a number of mandatory elements that must be achieved to successfully acquire a code rating. During this review, it is assumed that the mandatory elements will be achieved. If any of the mandatory elements are not achieved, a nil rating is all that can be provided.
- e) The assessment has highlighted areas where improvements can be made in order to achieve Code Level 3. If the current specification is incorporated and the current credits achieved, the Pre Assessment shows that a rating of for the dwelling is 61.86 or Level 3 can be possible. However, during detail design and construction, care must be taken as it is very easy to lose credits, especially by not gathering and maintaining the evidence.
- f) It is important that the Client and Contractor understand the principles of the Code Assessment and that they assist in gathering and recording the evidence.
- g) Specialist consultants are required in order to achieve some of the credits targeted and these include an ecologist and hydrological engineer. These must be suitably qualified to the requirements set out by the BRE.



## **Appendix A – Assessment Comments**



Issue ID	Description	Mandatory	Current Spec	Spec Credits	Assumptions to Achieve Level 3	Credits Awarded	Comments	Max Credits
Category 1: Energy and Carbon Dioxide Emissions								
Ene 1	Dwelling Emission Rate	Yes	Preliminary SAP undertaken but needs to be confirmed when Working Drawings complete	4	DER is 48% better than TER	4	The U Values of the various constructions could be improved by adding extra insulation and changing the construction  More efficient heating system or better controls Improved Air Permeability Incorporate renewable technology Incorporate secondary heating source	10
Ene 2	Fabric Energy Efficiency	Yes	Preliminary SAP undertaken but needs to be confirmed when Working Drawings complete	6	FEE from preliminary SAP is 41.65	6	This should be provided by SAP Assessor. 3 Credits are awarded if FEE is less than or equal to 48 and 4 Credits are awarded if FEE is less than or equal to 45 and follows a sliding scale	9
Ene 3	Energy Display Devices	No		0	Assume electric monitors are provided	1	For 1 Credit, primary heating fuel displayed or electricity displayed and 2 Credits can be awarded if both are displayed.	2
Ene 4	Drying Space	No		0	Adequate Internal drying spaces shall be provided	1	For 1-2 beds, 4+m are required and for 3+ beds, 6+m are required.  Internal drying space requires heating and ventilation	1
Ene 5	Energy Labelled White goods	No	Unknown	0	Only EU Energy Efficiency Information is being provided	1	1 Credit if Fridge & Freezer or Fridge Freezer - A+ rated 1 Credit if Washing Machine & Dishwasher - A rated AND EITHER washer dryer or tumble dryer - B rated OR washer dryer or tumble dryer is not provided but information the EU Labelling Scheme is provided	2
Ene 6	External Lighting	No	Switched space lighting with compact fluorescent lamps	1  0	Assume space lighting meets specification  Assume no security lighting is provided	1  0  1	Space Lighting - 1 Credit where all external space lighting is provided by dedicated energy efficient fittings  Security Lighting - 1 Credit where security light fittings are design for energy efficiency and are adequately controlled.  All burglar security lights must have a maximum wattage of 150W. Movement detecting controls devices and daylight cut off sensors All other security lighting to be dedicated energy efficient fittings and fitted with daylight cut off sensors.  Default case - Credit can be awarded if no security lights are provided	2
Ene 7	Low or Zero Carbon Technology	No		2	20% Reduction required for planning	2	Feasibility Study required and detailed calculations to demonstrate a 20% reduction	2
Ene 8	Cycle Storage	No	Cycle Storage provided	0	No secure storage is provided for the dwelling and the other criteria is met  Storage could be provided at entrance level	0	1 Credit - 2/3 bed - 1 cycle & 4+ bed - 2 cycles. 2 Credits - 2/3 bed - 2 cycles & 4+ bed - 4 cycles.  Adequately sized - 2 cycles 2m long x 1.5m wide. Cycles must be able to be removed independently. If in a shed, 1m2 is also required for garden tools and must have concrete base and secure fixings. If in garage, car must fit as well as cycles.  Convenient access - Easy and direct access from/to dwelling and public right of way, not through dwelling  Secure entrance lock - Permanent lock (not padlock) that conforms to BS3621:2004 Secure fixing - a steel fixing set in concrete which allows both wheel and frame to be locked securely, e.g. Sheffield type frame. Secure storage - In dwellings - for fully enclosed solid structures - secure entrance lock or secure fixing; and for non solid enclosed structure - secure entrance lock and secure fixing; for non fully enclosed structures (three walls and roof) - secure fixings required.  Weatherproof = adequate protection from elements - normally at least three walls and a roof	2
Ene 9	Home Office	No	Use Bed 4	1	Assume adequate space including necessary requirements are provided within either bedroom or living room	1	This space must have at least 1.8m wall length, 2 double sockets, two telephone lines (1 phone and broadband), window (daylight factor 1.5%) and adequate ventilation (openable window minimum 0.5m2 opening. For a 2 bedroom homes, a suitable room maybe in the living room or bedroom, providing it does not prevent the intended use of the room.	1



Issue ID	Description	Mandatory	Current Spec	Spec Credits	Assumptions to Achieve Level 3	Credits Awarded	Comments	Max Credits
Category 2: Water								
Wat 1	Indoor Water Use	Yes		0	Calculations on the current Specification show a flow rate of less than 105l/p/day  consider reducing flow rate to under 90 L/p/day for an extra credit	3	Water Calculator tool (Wat 1) is used to calculate the water consumption for the dwelling. If appliance or fitting is specified the water consumption is used. If not, default figures are used, for example  - Regular taps for sink or basin - 12l/min - High flow shower - 14 l/min - Standard bath - 225 l capacity to overflow - Washing machine - 49 l/use - Dishwasher - 13 l/use - WC - 6 l cistern  The calculator tool uses standard usage patterns to estimate daily consumption. If all default figures are used, the daily consumption figure would be 212.05 l/person/day. The figure would be in excess of the 120 l/person/day that is required for Level 1  To achieve the flow rates stated, flow restrictors would need to be fitted.  No grey water or rain water is assumed to be used within the dwellings	5
Wat 2	External Water Use	No	No private space	1	No communal water collection device is provided	1	The water butt needs to be on a base, connected to downpipe with overflow and removable for cleaning.	1
Category 3: Materials								
Mat 1	Environmental Impact of Materials	Yes	Unknown	0	Based on the Green Spec Guide, three elements have been given a rating Windows - A Roof - A Ext Wall - A Ext Wall (Party) - A	10	There is a mandatory requirement to achieve Green Guide Rating of between A+ and D for at least three of the five elements in the building envelope, those being  - Roof - External walls - Internal walls (inc separating walls) - Upper and ground floors (inc separating walls) - Windows Then to achieve between 1 and 15 credits, the Mat 1 Calculator Tools must be used.	15
Mat 2	Responsible Sourcing of Material - Basic Building Elements	No	Unknown	0	Not Targeted at this time. Further information on materials required	0	Points are awarded where materials used in the key basic building elements are sourced according to the following criteria - Where 80% of the assessed materials in the following building elements are responsibly sourced:  - Frame - Ground floor - Upper floors (inc separating floors) - Roof - External walls - Internal walls (inc separating walls) - Foundations/substructures (exc sub base) - Staircase Additionally 100% of timer in these elements must be sourced legally.	6
Mat 2	Responsible Sourcing of Material - Finishing Elements	No	Unknown	0	Not Targeted at this time. Further information on materials required	0	Points are awarded where materials used in the key basic building elements are sourced according to the following criteria - Where 80% of the assessed materials in the following finishing elements are responsibly sourced:  - Stair - Window - Upper floors (inc separating floors) - External & internal doors - Skirting - Panelling - Furniture - Fascias Additionally 100% of timer in these elements must be sourced legally.	3



Issue ID	Description	Mandatory	Current Spec	Spec Credits	Assumptions to Achieve Level 3	Credits Awarded	Comments	Max Credits
<b>Category 4: Surface Water Run-off</b>								
Sur 1	Management of Surface Water Run-off from development	Yes	No FRA being undertaken	0	Assume Mandatory element is met  Calcs and FRA required for a credits	M  0	<p>The aim is to design housing developments which avoid, reduce and delay the discharge of rainfall to public sewers and watercourses, in order to protect watercourses and reduce the risk of localised flooding.</p> <p>The mandatory element is to ensure that the <b>Peak Rate of Runoff</b> is no greater for the developed site than it was for the pre-developed site. An allowance for climate change as per PPS25 should be allowed.</p> <p>The <b>Volume of Runoff</b> caused by the development for a 1 in 100 year event of 6 hours, should be reduced using infiltration and/or made available for use in the dwelling as a replacement for potable water use in non-potable applications</p> <p>2 credits are available for using SUDS to improve the rainwater discharged or for protecting the quality of the receiving waters by ensuring no discharge to the watercourse for rainfall depths of up to 5mm</p>	2
Sur 2	Flood Risk	No	FRA	2	Assume Zone 1 - Low risk of flooding	2	1 Credit is available for developments situated in Zone 2 and 3 (medium to high annual probability) and where mitigation has been incorporated, i.e. finished ground floor of habitable rooms and access routes to ground floor are at least 600mm above flood level	2
<b>Category 5: Waste</b>								
Was1	Storage of non-recyclable waste & recyclable waste	Yes	Specification required	4	Assume Mandatory element is met  Assume that a Local Authority Collection scheme, at least fortnightly, will be provided The recyclable waste is sorted after collection  A combination of internal storage capacity provided in an adequate internal space with a Local Authority scheme.  A single 30 litre storage bin with adequate internal space is provided and the external storage has a minimum total capacity of 170 l, within 30m of the door.	M  4	<p>The space allocated for waste storage should be able to accommodate containers with at least the minimum volume recommended by BS5906 based on a maximum collection of once per week.</p> <p>This is 100 litres for a single bedroom, with a further 70 litres for each additional bedroom</p> <p>All containers must be accessible to disabled people and sited on hard, level surface</p> <p>A local Authority recycling scheme offering containers equal or greater than this volume would meet the requirement, providing outdoor space is allocated to them.</p>	4
Was 2	Construction Site Waste Management	Yes	Specification required	2	Assume Mandatory element is met  Assume SWMP is being developed and implemented  Assume commitments to sort and divert 50% of waste from landfill	M  1  0	<p>A Site Waste Management Plan must be developed and implemented, including monitoring and reporting the waste generated.</p> <p>The SWMP must include procedures and commitments for reducing waste generated on site in accordance with best practise and the defined waste groups</p> <p>The SWMP must include procedures and commitments to sort and divert waste from landfill (reuse, recycle, compost or otherwise recover) according to the defined waste groups. This must be performed either on site or through a licensed external contractor. Procedure to divert and sort 50% of waster get 1 Credits and 85% of waste for 2 Credits</p>	1  1
Was 3	Composting	No	Not Specified	-	Assume no Home Composting bin provided	0	Either individual or communal composting facilities can be provided. All facilities must be in a dedicate position, be accessible to disabled and have an information leaflet	1
<b>Category 6: Pollution</b>								
Pol 1	Global Warming Potential of Insulants	No	Specification required	-	All insulating materials in elements have a GWP less than 5	1	Including roofs (including loft access), walls (internal and external, including acoustic insulation and lintels), all ground and upper floors, hot water cylinders, pipe, cold water tanks and external doors	1
Pol 2	NOx Emissions	No	Specification required	-	Assume 40mg/kWh	3	A boiler with less than 100mg/kWh would get 1 credit, under 70mg/kWh gets 2 credits and less than 40mg/kWh gets 3 credits.	3



Issue ID	Description	Mandatory	Current Spec	Spec Credits	Assumptions to Achieve Level 3	Credits Awarded	Comments	Max Credits
Category 7: Health & Wellbeing								
Hea 1	Daylighting	No	Calculation required	-	Assume kitchen achieves daylight factor of at least 2% Assume living room and Home Office achieves daylight factor of at least 1.5%  Assume all assessed rooms do not achieve this.	0  1  0	The average daylight factor, position of no-sky line and the percentage of working plane that receives direct sun light calculations need to be carried out  1 Credit if kitchen achieves a minimum average daylight factor of at least 2% - Calculations are required to prove this.  1 Credit all living and dining rooms and studies achieve a daylight factor of at least 1.5% - Calculations are required to prove this.  1 Credit if 80% of the working plane in each kitchen, living room, dining room and study receive direct light from the sky - Calculations are required to prove this.	3
Hea 2	Sound Insulation	No	Unknown	-	Habitable rooms are not adjacent to the party wall, they are separated on both sides by stairs/corridors	3	1 Credit where the airborne sound insulation values are at least 3dB higher and the impact sound insulation values are at least 3dB lower than the performance standards of the Building Regulations  3 Credits where the airborne sound insulation values are at least 5dB higher and the impact sound insulation values are at least 5dB lower than the performance standards of the Building Regulations  4 Credits where the airborne sound insulation values are at least 8dB higher and the impact sound insulation values are at least 8dB lower than the performance standards of the Building Regulations	4
Hea 3	Private Space	No	None Provided	0	None Provided	0	Where outdoor space has been provided that is a minimum size that allows all occupants to sit outside, allows easy access to all occupants, including wheelchairs and accessible only to occupants to the designated dwellings (minimum size 1.5m2/bedroom)	1
Hea 4	Lifetime Homes	Yes (Level 6)	Not Sought	0	Not Sought	0	All principles of Lifetime Homes have to be compiled with to achieve 4 Credits. A completed Lifetime Homes Checklist Hea4 indicating compliance with all applicable points from 1-16, signed by the developer	4
Category 8: Management								
Man 1	Home User Guide	No	Not Specified	0	Home user guide will be provided and include operational issues          This will include site and surroundings information	2          1	2 Credits for a home user guide, compiled using Checklist Man 1 Part 1 together with information that the guide is available in alternative accessible formats.  Checklist Man 1 Part 1 includes - Environmental strategy/design features - Energy - Water Use - Recycling and Waste - Sustainable DIY - Emergency Information - Links, References and Further Information - Provision of Information in Alternative Formats  1 Credit where the guide also covers information relating to the site and its surroundings, compiled using Checklist Man 1 Part 2 Checklist Man 1 Part 2 includes - Recycling and Waste - Sustainable (Urban) Drainage Systems - Public Transport - Local amenities - Responsible Purchasing - Emergency Information - Links, References and Further Information	3
Man 2	Considerate Constructors Scheme	No	Ensure Client is aware	-	Assume Best Practise is adopted	2	Where there is a commitment to meet Best Practice under the Considerate Constructors Scheme there is 1 Credit, but 2 Credits are given where the commitment is to go significantly beyond Best Practice	2



Issue ID	Description	Mandatory	Current Spec	Spec Credits	Assumptions to Achieve Level 3	Credits Awarded	Comments	Max Credits
Man 3	Construction Site Impacts	No	Ensure Client is aware	-	Assume 4 of the procedures are implemented, probably the following ones-  CO2 production or energy use arising from site activities water consumption from site activities air (dust) pollution arising from site activities 80% of site timber is reclaimed, reused or responsibly sourced	2	When procedures that cover the following items are put in place:  - Monitor, report and set targets for the CO2 production or energy use arising from site activities  - Monitor and report CO2 or energy use arising from commercial transport to and from site - Monitor, report and set targets for water consumption from site activities  - Adopt best practise policies in respect of air (dust) pollution arising from site activities  - Adopt best practise policies in respect of water (ground and surface) pollution occurring on the site - 80% of site timber is reclaimed, re-used or responsibly sourced. 1 Credit if 2 or more procedures are adopted and 2 Credits if 4 or more are adopted	2
Man 4	Security	No	-	0	Assume Police are consulted	2	Where an Architectural Liaison Officer or Crime Prevention Design Advisor from the local police is consulted at the design stage and their recommendations incorporated into the design of the dwellings	2

Category 9: Ecology

Eco 1	Ecological Value of Site	No	Site does not have a low ecological value	1	Site does not have a low ecological value	1	Where the development site is confirmed as land of inherently low ecological value, <b>EITHER</b> By meeting the criteria for low ecological value using Checklist Eco 1, <b>OR</b> By being confirmed by a Suitably Qualified Ecologist, <b>OR</b>  Where an independent ecological report of the site, prepared by a Suitably Qualified Ecologist, confirms that the construction zone is of low ecological value <b>AND</b>  Any land of ecological value outside the construction zone but within the development site remain undisturbed by the construction works	1
Eco 2	Ecological Enhancement	No	Unknown	0	Site does not have a low ecological value	0	Where a Suitably Qualified Ecologist has been appointed to recommend appropriate ecological features that will positively enhance the ecology of the site, <b>AND</b>  Where the developer adopts all key recommendations and 30% of additional recommendations.	1
Eco 3	Protection of Ecological Features	No		1	Site does not have a low ecological value	1	Where all existing features of ecological value on the developments site potentially affected by the works are maintained and adequately protected during site clearance, preparation and construction works.	1
Eco 4	Change in Ecological Value of Site		Neutral change in ecological value	2	Site does not have a low ecological value and proposals are not changing it	2	The ecological value before and after development is measured, and the overall change in species per hectare is:  - 1 Credit - Minor negative change between -9 and less than or equal to -3 - 2 Credits - Neutral change greater than -3 and less than or equal to +3 - 3 Credits - Minor enhancement greater than 3 and less than or equal to 9 - 4 Credits - Major Enhancement greater than +9	4
Eco 5	Building Footprint	No		0	Assume ratio of combined floor area of all dwellings on site to the footprint is greater than 3:1 as this is a four storey building	2	1 Credit where the Net Internal Floor Area:Net Ground Floor Area ratio is greater than or equal to 3:1 or 2 Credits where the Net Internal Floor Area:Net Ground Floor Area ratio is greater than or equal to 4:1	2



## **Appendix B – Pre-Assessment Estimator**

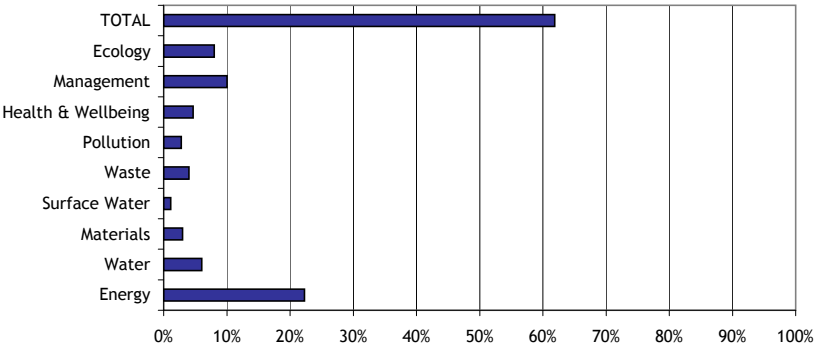
**PREDICTED RATING - CODE LEVEL: 3**

**Mandatory Requirements:** All Levels

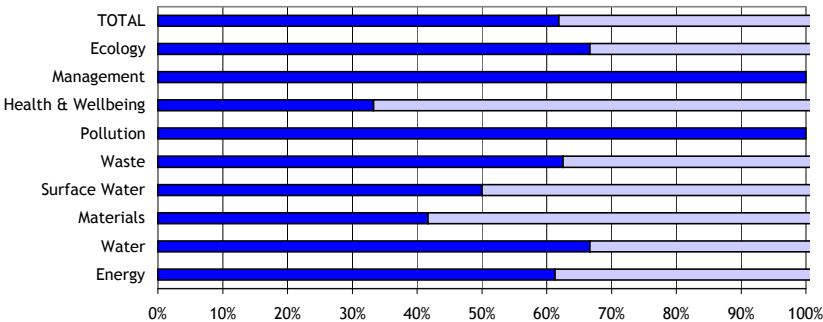
**% Points:** 61.86% - Code Level: 3

**Breakdown:** Energy - Code Level: 3  
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: 3	Overall Score	61.86
% of Section Credits Predicted: 61.29		Credits		Level
Contribution to Overall % Score: 22.30 points		19.0 of 31 Credits		Level 3
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="2.0"/></p> <p>OR Are zero net CO<sub>2</sub> emissions achieved? <input type="checkbox"/></p>	2.0 of 10 Credits	Level 3	
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 type="radio"/></p> <p>OR End terrace, Semi and Detached <input checked="" type="radio"/></p> <p>OR Staggered Mid terrace <input type="radio"/></p> <p>What is the predicted number of credits? <input type="text" value="8.0"/></p>	8.0 of 9 Credits	Level 6	
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 checked="" type="radio"/></p> <p>OR Electricity and primary heating fuel <input type="radio"/></p>	1 of 2 Credits	-	

Issue		Credits	Level
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> <p>Yes <input checked="" type="radio"/></p> <p>OR No <input type="radio"/></p>	1 of 1 Credits	-
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> <p>EU Energy labelling information only <input checked="" type="checkbox"/></p> <p>A+ rated appliances <input type="checkbox"/></p> <p>A+, A and B rated appliances <input type="checkbox"/></p> <p>Combination of compliant rated white goods with EU Energy Labelling Scheme <input type="checkbox"/></p>	1 of 2 Credits	-
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> <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 checked="" type="radio"/></p> <p>OR Non Code compliant lighting <input type="radio"/></p> <p>OR Code compliant lighting and controls <input type="radio"/></p> <p>Dual lamp luminaires _____</p> <p>Compliant with both above criteria <input type="checkbox"/></p>	2 of 2 Credits	-

\* Statutory safety lighting is not covered by this requirement

Issue		Credits	Level
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	-
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" value="4"/></p> <p>Number of cycles stored per dwelling* <input type="text" value="2.0"/></p> <p>* if you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles stored per dwelling</p>	1 of 2 Credits	-
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>Yes <input checked="" type="radio"/></p> <p>OR No <input type="radio"/></p>	1 of 1 Credits	-

CATEGORY 2 WATER		Overall Level: 3	Overall Score	61.86
% 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> <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	
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 checked="" type="radio"/></p> <p>OR Outdoor space with collection system <input type="radio"/></p> <p>OR Outdoor space without collection system <input type="radio"/></p>	1 of 1 Credits	-	

CATEGORY 3 MATERIALS		Overall Level: 3	Overall Score	61.86
% of Section Credits Predicted: 41.66		Credits		Level
Contribution to Overall Score: 3.00 points		10 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	
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"/></p>	0 of 6 Credits	-	
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"/></p>	0 of 3 Credits	-	

CATEGORY 4 SURFACE WATER RUN-OFF		Overall Level: 3	Overall Score	61.86
% of Section Credits Predicted: 50.00%		Credits		Level
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 —</p> <p>Will the mandatory requirement be met? <input checked="" type="checkbox"/></p> <p>Select the appropriate option —</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	
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	-	

\* Planning Policy Statement 25 - Planning and Flood Risk  
\*\* FRA - Flood Risk Assessment

CATEGORY 5 WASTE		Overall Level: 3	Overall Score	61.86
% of Section Credits Predicted: 62.00%		Credits		Level
Contribution to Overall Score: 4.00 points		5 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. Tradable Credits are awarded for adequate internal and/ or external recycling facilities.</p> <div> <p>Mandatory Requirement</p> <p>Will the minimum space be provided and be accessible to disabled people? <input checked="" type="checkbox"/></p> </div> <div> <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> </div> <div> <p>Local Authority collection Scheme</p> <p>Post Collection sorting <input checked="" type="checkbox"/></p> <p>Internal storage (capacity 30 litres) <input checked="" type="checkbox"/></p> <p>Pre-collection sorting <input type="checkbox"/></p> <p>Internal storage (3 separate bins, capacity 30 litres) <input type="checkbox"/></p> </div> <div> <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 <input type="checkbox"/></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> </div>	0 of 2 Credits	4 of 4 Credits	All Levels
		0 of 4 Credits		

Issue		Credits	Level
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> <p>SWMP details</p> <p>Does the SWMP include:</p> <p>+ No SWMP <input type="radio"/></p> <p>+ SWMP with targets and procedures to minimise waste? <input checked="" type="radio"/></p> <p>+ SWMP with procedures to divert 50% of waste <input type="radio"/></p> <p>+ SWMP with procedures to divert 85% of waste <input type="radio"/></p> </div>	1 of 3 Credits	
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> <p>Select the facilities available</p> <p>No composting facilities <input checked="" type="radio"/></p> <p>Individual composting facilities <input type="radio"/></p> <p>OR Communal/ community composting*? <input type="radio"/></p> <p>Local Authority <input type="checkbox"/></p> <p>OR Private with management plan <input type="checkbox"/></p> </div>	0 of 1 Credit	-

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

CATEGORY 6 POLLUTION		Overall Level: 3	Overall Score	61.86
% 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> <div> <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> </div>	1 of 1 Credits	-	
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> <div> <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> </div>	3 of 3 Credits	-	

CATEGORY 7 HEALTH & WELLBEING		Overall Level: 3	Overall Score	61.86
% of Section Credits Predicted: 33.00%		Credits		Level
Contribution to Overall Score: 4.66 points		4 of 12 Credits		No Level
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> <div><p>Select the compliant areas</p><div><p><u>Room</u></p><p>Kitchen: Avg DF of at least 2% <input 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 type="checkbox"/></p></div></div> <p>Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.</p>	1 of 3 Credits	-	
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> <div><p>Select a type of property</p><div><p>Detached Property <input type="radio"/></p><p>Attached Properties:</p><p>- Separating walls and floors only exist between non habitable spaces <input checked="" type="radio"/></p><p>- Separating walls and floors exist between habitable spaces <input type="radio"/></p></div></div> <div><p>Select a performance standard</p><div><p>Performance standard not sought <input checked="" type="radio"/></p><p>Airborne: 3db higher; Impact: 3dB lower <input type="radio"/></p><p>OR Airborne: 5db higher; Impact: 5dB lower <input type="radio"/></p><p>OR Airborne: 8db higher; Impact: 8dB lower <input type="radio"/></p></div></div>	3 of 4 Credits	-	

Issue	Credits	Level
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 data-bbox="326 300 781 411"> <p>Will a private/ semi-private space be provided? _____</p> <p>Yes, private/semi-private space will be provided <input type="radio"/></p> <p>OR No private/semi-private space <input checked="" type="radio"/></p> </div>	<p>0 of 1 Credits</p> <p>-</p>
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 data-bbox="326 562 781 636"> <p>Mandatory Requirement _____</p> <p>Dwelling to achieve Code Level 6? <input type="checkbox"/></p> </div> <div data-bbox="326 646 781 766"> <p>Lifetime Homes Compliance _____</p> <p>All Lifetime Homes criteria will be met <input type="radio"/></p> <p>OR Exemption from LTH criteria 2/3 applied <input type="radio"/></p> <p>Credit not sought <input checked="" type="radio"/></p> </div>	<p>0 of 4 Credits</p> <p>No level</p>

CATEGORY 8 MANAGEMENT		Overall Level: 3	Overall Score	61.86
% of Section Credits Predicted: 100.00%		Credits		Level
Contribution to Overall Score: 10.00 points		9 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> <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	-	
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> <p>No scheme used <input type="radio"/></p> <p><u>Considerate Constructors</u></p> <p>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><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>	2 of 2 Credits	-	
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> <p><u>Monitor, report and set targets, where applicable, for:</u></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 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 type="checkbox"/></p> <p>80% of site timber is reclaimed, re-used or responsibly sourced <input checked="" type="checkbox"/></p> </div>	2 of 2 Credits	-	

Issue	Credits	Level
<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> <div data-bbox="324 346 779 430"> <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> </div>	<p>2 of 2 Credits</p> <p>-</p>

CATEGORY 9 ECOLOGY		Overall Level: 3	Overall Score	61.86
% of Section Credits Predicted: 66.00%		Credits		Level
Contribution to Overall Score: 8.00 points		6 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 type="radio"/></p> <p>OR Land has low/ insignificant ecological value* <input checked="" 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>	1 of 1 Credits	-	
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 type="checkbox"/></p> <p>AND Will all key recommendations be adopted? <input type="checkbox"/></p> <p>AND 30% of other recommendations be adopted? <input type="checkbox"/></p>	0 of 1 Credits	-	
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 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> <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	-	

Issue		Credits	Level
Eco 4 Change of Ecological Value of Site	<p>Credits are awarded where the change in ecological value has been calculated in accordance with the Code requirements and is calculated to be:</p> <div> <p>Change in Ecological Value</p> <p>Major negative change: fewer than -9 <input type="radio"/></p> <p>Minor negative change: between -9 and -3 <input type="radio"/></p> <p>OR Neutral: between -3 and +3 <input checked="" type="radio"/></p> <p>Minor enhancement: between +3 and +9 <input type="radio"/></p> <p>Major enhancement: greater than 9 <input type="radio"/></p> </div>	2 of 4 Credits	-
Eco 5 Building Footprint	<p>Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is:</p> <div> <p>Ratio of Net Internal Floor Area: Net Internal Ground Floor Area</p> <p>Credit Not Sought <input type="radio"/></p> <p>OR Houses: 2.5:1 OR Flats: 3:1 <input type="radio"/></p> <p>OR Houses: 3:1 OR Flats: 4:1 <input checked="" type="radio"/></p> <p>OR Houses &amp; Flats Weighted (2.5:1 &amp; 3:1) <input type="radio"/></p> <p>OR Houses &amp; Flats Weighted (3:1 &amp; 4:1) <input type="radio"/></p> </div>	2 of 2 Credits	



## **Appendix C – Evidence Requirements**

## - Energy Category -

Issue	Design Stage			Post Construction Stage		
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
Ene 1	Design Stage - SAP 2009 Worksheets	✓		As Built Stage – SAP 2009 Worksheet		✓
	Plans and elevations showing construction details	✓		Evidence confirming build form as described in As Built SAP Worksheets		✓
	Specification text confirming intention where SAP cannot be produced at design stage		✓	Code Assessor Site Inspection Report		✓
	Copy of Design Stage Part L1A Building Regulations Compliance Checklist	✓		Confirmation of construction details for each Energy Type		✓
	Copy of outputs from Ene1/Ene7 tool	✓		Copy of As Built Part L1A Building Regulations Compliance Checklist	✓	
	Utility location maps		✓	Documentary evidence from Building Control Officer		✓
	Copy of outputs from SAP input tool		✓	Copy of outputs from SAP input tool		✓
				Copy of outputs from Ene1/Ene7 tool	✓	
				Utility location maps		✓
Ene 2	Design Stage - SAP 2009 Worksheets	✓		As Built Stage – SAP 2009 Worksheet		✓
	Copy of Design Stage Part L1A Building Regulations Compliance Checklist	✓		Evidence of final construction materials, built form and specifications	✓	
	Written confirmation from the Environmental Agency where under protection of existing flood defences	✓		Copy of As Built Part L1A Building Regulations Compliance Checklist	✓	
	Specification text confirming intention where SAP cannot be produced at design stage		✓	Letter of conformity to specification		✓
				Assessor Site Inspection Report		✓
				Documentary evidence from Building Control Officer		✓
Ene 3	Drawings/specification text detailing the type of Energy Display device to be used	✓		As Built drawings and specifications		✓
	Specification text confirming intention to install just an electric or to include primary heating supply		✓	Manufacturer's details of the Energy Display Devices	✓	
	Letter of instruction to contractor/supplier		✓	Assessor Site Inspection Report		✓
	Letter from developer to assessor giving the specific undertaking		✓	Purchase orders/receipts for energy display devices		✓
Ene 4	Text describing location and length of drying line	✓		Photographic evidence for each spec ID Text describing location and length of drying line	✓	✓
	Drawings showing location and details of internal drying space and ventilation		✓	Drawings showing location and details of internal drying space and ventilation		✓
	Drawings showing location of fixtures/footings of external drying space		✓	Drawings showing location of fixtures/footings of external drying space		✓
	Specification text confirming intention where drying space specification is not known at design stage		✓	Specification text confirming intention where drying space specification is not known at design stage		✓
	Letter of instruction to contractor/supplier		✓	Letter of instruction to contractor/supplier		✓
	Letter from developer to assessor giving the specific undertaking		✓	Letter from developer to assessor giving the specific undertaking		✓
				Purchase orders/receipts of drying devices		✓
				Photographic evidence for each spec ID		✓
Ene 5	Specification text confirming make and model of white goods provided		✓	Assessor Site Inspection Report Manufacturer's literature for any white goods installed		✓
	Confirmation of energy rating for all white goods provided		✓	Assessor Site Inspection Report		✓
	Copy of EU Energy Efficiency Labelling Scheme leaflet		✓	Purchase orders/receipts for all white goods provided		✓
	Specification text/drawings confirming intention to provide leaflets or white goods		✓	Copy of EU Energy Efficiency Labelling Scheme leaflet		✓

Issue	Design Stage			Post Construction Stage		
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
	Letter of instruction to contractor/supplier		✓	Specification text/drawings confirming leaflets will be provided to all dwellings		✓
	Letter from developer to assessor giving the specific undertaking		✓	Letter of instruction to contractor/supplier		✓
				Letter from developer to assessor giving the specific undertaking		✓
				Written confirmation of information provided to dwellings		✓
Ene 6	Drawings showing location of all external light fittings	✓		As Built drawings/specifications confirming construction in accordance with design stage	✓	
	Text confirming location and type of all external light fittings	✓		Manufacturer's literature	✓	
	Specification text confirming intention where external lighting specification is not known at design stage		✓	Purchase orders/receipts		✓
	Letter of instruction to contractor/supplier		✓	Photographic evidence		✓
	Letter from developer to assessor giving the specific undertaking		✓	Assessor Site Inspection Report		✓
Ene 7	Confirmation that feasibility study has been completed by an independent energy specialist	✓		Confirmation that design has been carried out by an independent energy specialist	✓	
	Design Stage – SAP 2009 Worksheet	✓		Design Stage – SAP 2009 Worksheets and supporting information		✓
	Drawings showing location of LZC technologies	✓		As Built – SAP 2009 Worksheets for each Energy Type		✓
	Specification text detailing type, location and use of LZC equipment in dwellings	✓		Drawings showing location of LZC technologies	✓	
	Manufacturer's details for LZC technologies		✓	Assessor Site Inspection Report		✓
	Specification text confirming intention where details of LZCs are not known at design stage		✓	Photographic evidence		✓
				Manufacturer's details for LZC technologies		✓
Ene 8	Drawings showing location, size, security and access to cycle storage	✓		Assessor Site Inspection Report		✓
	Specification text detailing location, size, security and access to cycle storage	✓		Purchase orders/receipts		✓
	Drawings/specification text detailing any proprietary system		✓	Photographic evidence		✓
	Confirmation of bedrooms served by cycle storage and relevant calculations	✓				
	Letter of instruction to contractor/supplier		✓			
	Letter from developer to assessor giving the specific undertaking		✓			
Ene 9	Drawings/specification text detailing location, size and services to the home office	✓		Assessor Site Inspection Report		✓
	Drawings/specification text confirming adequate ventilation to home office	✓		As Built drawings showing location and services		✓
	Text confirming broadband availability to each dwelling		✓	Photographic evidence		✓
	Specification text confirming intention where details of home office are not known at design stage		✓			
	Average Daylight Factor calculations	✓				
	Letter of instruction to contractor/supplier		✓			
	Letter from developer to assessor giving the specific undertaking		✓			

### - Water Category -

Issue	Design Stage			Post Construction Stage		
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
<b>Wat 1</b>				As Built drawings/specification detailing internal, rainwater and greywater systems		✓
	Specification text detailing water fittings	✓				
	Drawings showing the location of internal water fittings	✓		Letter from developer confirming installed fittings and equipment		✓
	Manufacturers literature for water fittings and appliances confirming flow rates of any water reduction equipment		✓	Manufacturer's literature for internal water fittings, and any greywater or rainwater systems	✓	
	Specification text detailing rainwater and greywater collection systems		✓	Assessor Site Inspection Report		✓
	Manufacturer's literature for rainwater and greywater appliances		✓	Photographic evidence		✓
	Drawings showing any rainwater and greywater systems		✓	Completed Code Water Calculator Tool, showing internal potable water use for each Spec ID	✓	
	Completed Code Water Calculator Tool, showing internal potable water use for each Spec ID	✓				
	Specification text confirming intention where details of water fittings are not known at design stage		✓			
	Letter of instruction to contractor/supplier		✓			
	Letter from developer to assessor giving the specific undertaking		✓			
<b>Wat 2</b>	Drawings showing location of any rainwater collection systems	✓		Letter from developer confirming installed systems		✓
	Written confirmation from the Environmental Agency where under protection of existing flood defences	✓		As built drawings/specifications		✓
	Specification text confirming intention where details of external water collection systems are not known at design stage		✓	Manufacturer's details of installed systems	✓	
	Letter of instruction to contractor/supplier		✓	Assessor Site Inspection Report		✓
	Letter from developer to assessor giving the specific undertaking		✓	Photographic evidence		✓

### - Materials Category -

Issue	Design Stage			Post Construction Stage		
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
<b>Mat 1</b>	Drawings showing location, areas and specification of elements	✓		Letter from developer confirming dwellings were constructed as at design stage		✓
	Specification text confirming element specification details	✓		As Built drawings/specifications		✓
	Completed Code Mat 1 Calculator Tool	✓		Assessor Site Inspection Report		✓
	Confirmation of Bespoke Ratings		✓	Documentary evidence for materials		✓
<b>Mat 2</b>	Letter of instruction to contractor/supplier		✓	Completed Code Mat 1 Calculator Tool showing elements As Built	✓	
	Letter from developer to assessor giving the specific undertaking		✓	Confirmation of Bespoke Ratings		✓
	Drawings or specification text detailing location, areas and details of materials	✓		Letter from developer confirming dwellings were constructed as at design stage		✓
	Completed Code Mat 2 Calculator Tool or relevant calculations	✓		As Built drawings/specifications		✓
	Confirmation to use specific timber schemes	✓		Purchase orders, receipts or certificates/letters confirming materials	✓	
	Confirmation to use EMS suppliers certified for key process and for extraction stage		✓	Completed Code Mat 2 Calculator Tool or relevant calculations		✓
	Confirmation of any elements being recycled/reused		✓	Documentary details for re-used materials		✓
	Written confirmation from the Environmental Agency where under protection of existing flood defences		✓	Documentary details for recycled materials		✓
	Letter of instruction to contractor/supplier		✓	Documentary evidence for materials certified through EMS		✓
	Letter from developer to assessor giving the specific undertaking		✓	CoC certificate for certified timber materials		✓
				Written confirmation from suppliers confirming status of non-certified timber materials		✓
<b>Mat 3</b>	Drawings or specification text detailing location, areas and details of materials	✓		Letter from developer confirming dwellings were constructed as at design stage		✓
	Completed Code Mat 3 Calculator Tool or relevant calculations	✓		As Built drawings/specifications		✓
	Confirmation to use specific timber schemes	✓		Purchase orders, receipts or certificates/letters confirming materials	✓	
	Confirmation to use EMS suppliers certified for key process and for extraction stage		✓	Completed Code Mat 3 Calculator Tool or relevant calculations		✓
	Confirmation of any elements being recycled/reused		✓	Documentary details for re-used materials		✓
	Confirmation to use suppliers who provide EMS certification (recycled materials)		✓	Documentary details for recycled materials		✓
	Letter of instruction to contractor/supplier		✓	Documentary evidence for materials certified through EMS		✓
	Letter from developer to assessor giving the specific undertaking		✓	CoC certificate for certified timber materials		✓
				Written confirmation from suppliers confirming status of non-certified timber materials		✓

### - Surface Water Runoff Category -

Issue	Design Stage			Post Construction Stage		
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
Sur 1	<b>To achieve Mandatory Elements</b>					
	Confirmation of appropriate consultant appointment	✓		Written confirmation that solutions designed have been implemented		✓
	Consultants report	✓		As Built drawings/specifications and calculations		✓
	Flood Risk Assessment	✓		Confirmation that Flood Risk Assessment still up to date	✓	
	Drawings and Text specifications necessary to confirm claims	✓				
	<b>To achieve tradable credits</b>					
	Consultants report with design specifications, calculations and drawings to support awarding credits	✓		Confirmation from hydrological consultant that system meets credit requirements	✓	
	Proposed operation and maintenance plans.	✓		As Built drawings and calculations		✓
				Manufacturers' data for all devices	✓	
				Copies of SUDs agreements	✓	
Sur 2	Flood Risk Assessment confirming the zone of the development	✓		Confirmation that Flood Risk Assessment still up to date		✓
	Written confirmation from the Environmental Agency where under protection of existing flood defences		✓	Written confirmation from the Environmental Agency where under protection of existing flood defences		✓
	Manufacturers details for flood protection measures for the dwelling		✓	Manufacturers details for flood protection measures for the dwelling		✓
	Site plans		✓	Site plans		✓
	Drawings showing location of flood protection measures		✓	Drawings showing location of flood protection measures		✓
				Confirmation that specifications same as design stage		✓
				As Built plans/specifications		✓

**- Waste Category -**

Issue	Design Stage			Post Construction Stage		
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
<b>Was 1</b>	<b>To achieve Mandatory Elements</b>					
	Completed Supplementary Information Sheet	✓		Completed Supplementary Information Sheet	✓	
	Completed Checklist Was 1	✓		Completed Checklist Was 1	✓	
	<b>To achieve tradable credits</b>					
	Drawings or specification text confirming number of bedrooms & specifications of external storage	✓		As Built drawings/specifications		✓
	Confirmation from LA detailing container specifications/frequency and waste streams of collection		✓	Written confirmation dwellings were constructed as at design stage		✓
	Confirmation of intention to use a private operator and details of the scheme		✓	Written justification for bins further than 30m from external door		✓
	Letter of instruction to contractor/supplier		✓	Confirmation of LA or similar private scheme details	✓	
	Letter from developer to assessor giving the specific undertaking		✓	Assessor Site Inspection Report		✓
				Photographic Evidence		✓
<b>Was 2</b>	<b>To achieve Mandatory Elements</b>					
	Written confirmation from the Environmental		✓	Copy of the Site Waste Management Plan		✓
	Documentary Legal evidence confirming agreed cost of development		✓	Completed Checklist Was 2a		✓
	Letter of instruction to contractor/supplier		✓	Completed Checklist Was 2d		✓
	Letter from developer to assessor giving the specific undertaking		✓	Records confirming monitoring of site waste throughout construction		✓
				Documentary Legal evidence confirming agreed cost of development		✓
	<b>To achieve tradable credits</b>					
	Completed checklist Was 2b		✓	Completed checklist Was 2b		✓
	Completed checklist Was 2c		✓	Completed checklist Was 2c		✓
	Completed checklist Was 2d		✓	Completed checklist Was 2d		✓
				Summary Report outlining overall waste performance	✓	
				Letter from developer to assessor		✓
<b>Was 3</b>	Completed copy of Checklist 1 – Was 1	✓		Assessor Site Inspection Report		✓
	Drawings or specification text confirming location, size and access to storage	✓		Drawings showing location, size and access route		✓
	Specification text confirming that an information booklet will be supplied to residents	✓		Photographic evidence		✓
	Letter of instruction to contractor/supplier		✓			
	Letter from developer to assessor giving the specific undertaking		✓			
	Manufacturer's information for proposed composting facilities		✓			
	Details of communal/community composting scheme		✓			
	Details of Local Authority kitchen waste collection scheme		✓			
	Details of the automated waste collection system		✓			

### - Pollution Category -

Issue	Design Stage			Post Construction Stage		
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
<b>Pol 1</b>	Completed Checklist Pol 1	✓		Manufacturer's/installer's literature for any foamed or blown insulation	✓	
	Drawings or specification text showing type and location of insulation materials	✓		Written confirmation that Checklist 6.1 Pol 1 is unchanged		✓
	Manufacturer's/installer's literature for any foamed or blown insulation		✓	Purchase order/receipts		✓
	Letter of intent to meet requirements for a Design and Build contract		✓	As built drawings/specification text showing type and location of		✓
	Letter of instruction to contractor/supplier		✓	Assessor Site Inspection Report		✓
<b>Pol 2</b>	Letter from developer to assessor giving the specific undertaking		✓			
	Drawings or specification text detailing heating systems	✓		Manufacturer's literature confirming dry NOx levels/boiler class of all heating systems		✓
	Specification text confirming Dry NOx levels and/or boiler class	✓		Letter/email from manufacturer confirming dry NOx levels		✓
	Manufacturer's literature details of heating system		✓	Purchase order/receipts		✓
	Calculation Procedures of dry NOx or weighted average NOx in accordance with the Guidance		✓	Assessor Site Inspection Report		✓
	Design Stage – SAP 2005 Worksheets		✓	Calculation of dry or ave NOx		✓
	Written confirmation from the Environmental Agency where under protection of existing flood defences		✓	As Built Stage – SAP 2005 Worksheet		✓
	Letter from developer to assessor giving the specific undertaking		✓	Evidence of contractual commitment to activate heating system within 18 months of completion		✓

## - Health & Wellbeing Category -

Issue	Design Stage			Post Construction Stage		
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
<b>Hea 1</b>	Average Daylight Factor calculations	✓		Calculations for all dwelling As Built	✓	
	No-sky line calculations	✓		Confirmation that inputs are accurate		✓
	Details of angle of visible sky, window glazing and room surface areas	✓		On-site measurements		✓
	Plans indicating room heights, glazed areas, and external buildings	✓				
	Manufacturer's details confirming specs where default values are not used		✓			
	Letter of instruction to contractor/supplier		✓			
	Letter from developer to assessor giving the specific undertaking		✓			
<b>Hea 2</b>	Specification text committing to meet relevant sound insulation performance levels	✓		Specification text committing to meet relevant sound insulation performance levels	✓	
	Details of pre-completion testing		✓	Details of pre-completion testing		✓
	Details of separating walls		✓	Details of separating walls		✓
	Confirmation of commitment to carry out remedial work where necessary		✓	Confirmation of commitment to carry out remedial work where necessary		✓
	Written confirmation from the Environmental Agency where under protection of existing flood defences		✓	Compliant Test Body accreditation details		✓
	Confirmation that Robust Details will achieve necessary standards		✓	Confirmation that Robust Details will achieve necessary standards		✓
	Confirmation that site is registered by RDL		✓	Confirmation that site is registered by RDL		✓
	Letter of instruction to contractor		✓	Letter of instruction to contractor		✓
	Letter from developer to assessor giving the specific undertaking		✓	Letter of intent from developer to assessor giving the specific undertaking		✓
				Confirmation of sound insulation results		✓
<b>Hea 3</b>	Plan(s)/specification text showing the number of bedrooms served	✓		As-Built drawing/specification confirmation		✓
	Plan(s)/specification text showing location and size of private space(s)	✓		Confirmation that dwellings constructed in accordance with design stage spec		✓
	Details of accessibility in accordance with BS8300	✓				
	Details of control arrangements for shared private spaces		✓			
	Letter of instruction to contractor/supplier		✓			
	Letter from developer to assessor giving the specific undertaking		✓			
<b>Hea 4</b>	Completed and signed Checklist Hea 4 – Lifetime Homes	✓		Completed As Built Lifetime Homes Checklist Hea 4	✓	
				Assessor Site Inspection Report		✓
				As Built Drawings		✓

### - Management Category -

Issue	Design Stage			Post Construction Stage		
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
<b>Man 1</b>	Confirmation that Homes User Guide will be supplied to all dwellings	✓		Copy of the Home User Guide for each type of dwelling	✓	
	Checklist Man 1 Part 1		✓	Confirmation that Home User Guide has been supplied to all dwellings		✓
	Checklist Man 1 Part 1 AND Checklist Man 1 Part 2		✓	Copy of letter to occupants and hard copy of contents page		✓
	Summary of Home User Guide contents	✓				
	Letter from developer to assessor giving the specific undertaking		✓			
<b>Man 2</b>	Confirmation on/from contractor/developer to achieve a specific CCS score		✓	Copy of CCS certificate		✓
	Completed Checklist Man 2 where an alternative scheme is to be used		✓	Copy of CCS monitored report with scorings		✓
	Letter of instruction/intent from developer to contractor or assessor giving specific undertaking		✓	Copy of alternative schemes certificate or equivalent documentary evidence		✓
<b>Man 3</b>	Commitment to meet either, two or more, or four or more items in Checklist Man 3	✓		Documentary evidence that design stage items from Man 3 have been adhered to		✓
	Completed Checklist Man 3 if available at design stage		✓	Documentary evidence of target records		✓
	Written confirmation from the Environmental Agency where under protection of existing flood defences		✓	Graphs comparing consumption with targets		✓
				Delivery records		✓
				Documentary evidence of site procedures for minimising pollution		✓
				Coc certificates for site timber		✓
				Purchase orders confirming re-used/reclaimed timber		✓
<b>Man 4</b>	Letter of appointment/letter from ALO/CPDA confirming appointment	✓		Confirmation that ALO/CPDA recommendations have been implemented in design	✓	
	Confirmation of commitment to meet Section 2 of Secured By Design	✓		Confirmation that site meets Section 2 of Secured by Design	✓	
	Confirmation of commitment to follow advice of the ALO/CPDA	✓		Copy of Secured by Design certificate		✓
	Letter of instruction to contractor		✓	Assessor Site Inspection Report		✓
	Letter from developer to assessor giving the specific undertaking		✓	As-built drawings		✓



### - Ecology Category -

Issue	Design Stage			Post Construction Stage		
	All	Mandatory	Where Applicable	All	Mandatory	Where Applicable
<b>Eco 1</b>	Plans of site and surrounding area prior to development		✓	Plans of site and surrounding area prior to development		✓
	Site visit report		✓	Site visit report		✓
	Completed Checklist Eco 1		✓	Completed Checklist Eco 1		✓
	Ecologists report using CSH Ecology Report Template		✓	Ecologists report using CSH Ecology Report Template		✓
	Plans defining the construction site	✓		Plans defining construction site		✓
<b>Eco 2</b>	Confirmation that ecologist's qualifications meet the requirements		✓	Confirmation that ecologist's qualifications meet the requirements		✓
	Letter of instruction to contractor/supplier		✓	As Built plans identifying features present		✓
	Letter from developer to assessor giving the specific undertaking		✓	Assessor Site Inspection Report		✓
	Completed Ecologists Report using the CSH Ecology Report Template	✓		Plans showing both proposed and implemented recommendations		✓
	Specification text/illustrations detailing implementation of recommendations	✓		Photographic evidence		✓
	Confirmation that Ecologist qualifications meet the requirements	✓		Assessor Site Inspection Report		✓
	Written confirmation from the Environmental Agency where under protection of existing flood defences	✓		Confirmation of contract or letter confirming planting will be completed within 18 months		✓
	Confirmation ecologist made site visit prior to commencement of initial site preparation works	✓				
	Confirmation detailing how ecologists recommendations will be implemented	✓				
	Drawings/letter of instruction to contractor/supplier		✓			
<b>Eco 3</b>	Letter from developer to assessor giving the specific undertaking		✓	Photographic evidence of protection measures		✓
	Site Visit Report from design team	✓		Photographic evidence of protected features		✓
	Drawings/specification text detailing how ecological features will be protected	✓		Assessor Site Inspection Report		✓
	Plans of site and boundary highlighting ecological features prior to development		✓			
	Evidence of any requirement to remove a feature		✓			
	Confirmation that all EU and UK laws to protect species have been adhered to		✓			
	Completed Ecologist's report using the CSH Ecology Report template		✓			
	Letter of instruction to contractor/supplier		✓			
<b>Eco 4</b>	Letter from developer to assessor giving the specific undertaking		✓			
	Plans of the site pre-development showing areas, landscape and plot types	✓		Completed Eco 4 Calculator Tool or similar calculations		✓
	Copy of calculations (from assessor) of proposed change in ecological value	✓		Letter/certificate of conformity from the developer		✓
	Completed Ecologist's report using the CSH Ecology Report template		✓	Confirmation of contract or letter confirming completion date		✓
	Specification text/illustrations showing implementation of Ecologist's recommendations		✓			
	Planting Schedule		✓			
	Letter of instruction to contractor/supplier		✓			
	Letter from developer to assessor giving the specific undertaking		✓			
<b>Eco 5</b>	Plans showing the Net Internal Floor and Ground Floor areas of all buildings	✓		As Built drawings/specifications		✓
	Elevations showing the number of storeys for each building	✓		Letter from developer confirming construction as at design stage		✓
	Building Footprint Ratio Calculations	✓				