

**29 NEW END, HAMPSTEAD
RESIDENTIAL ACCOMMODATION**

CODE FOR SUSTAINABLE HOMES

(NOVEMBER 2010 VERSION)

PRE ASSESSMENT REPORT

23 August 2012

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ISSUE STATUS

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INDICATIVE CSH PRE-ASSESSMENT FOR 'UNIT 10'

1.0 EXECUTIVE SUMMARY

An indicative Code for Sustainable Homes (CSH) pre-assessment has been undertaken for a Unit 4 and a Unit 10 from the 29 New End development. The apartments within the development are to be designed to achieve a Code for Sustainable Homes rating of Level 4****.

Code for Sustainable Homes assessments are carried out in three stages:

- **Step 1 is Pre-Assessment [current stage].**
- *Step 2 is Design Stage Assessment*
- *Step 3 is Post Construction Review*

This pre-assessment allows an evaluation of the likely rating to be achieved by a dwelling under a formal Code for Sustainable Homes assessment. The rating obtained in this pre-assessment is for guidance only. It is an initial estimation of the Code for Sustainable Homes score that would result should all the assumptions stated in this document be implemented in line with the requirements set out in the full Code for Sustainable Homes technical guidance.

The Design Stage Assessment is carried out on the detailed design of each dwelling in the period up to the issue of tender documents (RIBA Stage A – G). For the Design Stage assessment individual dwelling types will have to be assessed and will be given an interim rating certificate. The final CSH Rating certificate will be awarded after the completion of the Post Construction Review. The aim of Post Construction Review is to assess the individual dwellings 'as built'. Under Code for Sustainable Homes each individual dwelling requires its own assessment and rating.

The likely ratings have been calculated for the development using the Code for Sustainable Homes pre-assessment calculator Rev 03_2011 and Technical Guidance as published on 11th November 2010. The current set of design and specification assumptions yield the rating in the table below.

Unit type	Estimated average % reduction in dwelling emission rate over target emission rate	Estimated average internal potable water consumption (litres per person, per day)	Estimated final score	Code rating*
Unit 4	Part L 2010 Compliance	105 l/p/d	72.1%	4 ★ ★ ★ ★
Unit 10	Part L 2010 Compliance	105 l/p/d	70.3%	4 ★ ★ ★ ★

*In order to secure this rating, the mandatory minimum requirements must be met. Particular attention should be taken with these criteria. Failure to comply with these requirements may restrict or void the final code rating achieved irrespective of the final tradable credit score.

2.0 BACKGROUND TO THE CODE FOR SUSTAINABLE HOMES

The Code for Sustainable Homes is being used as a benchmarking tool in the design of new residential developments. The aim of the Code for Sustainable Homes is to estimate the sustainability of buildings and to promote a programme of design improvement. The Code is published by the Department for Communities and Local Government (CLG) and information is available at:

<http://www.communities.gov.uk/publications/planningandbuilding/codeguide>

Code for Sustainable Homes underlines 9 Categories of sustainable design:

- Energy and CO₂ Emissions;
- Water;
- Materials;
- Surface Water Run-off;
- Waste;
- Pollution;
- Health and Well-being;
- Management;
- Ecology.

The environmental impact categories within the Code are not of equal importance. Their relative value is conveyed by applying a weighting factor to the sum of all credit scores in a category.

Mandatory issues

Mandatory minimum performance standards are set for some issues. For 3 issues a single mandatory requirement is set which must be met, whatever Code level rating is sought. Credits are not awarded for these issues:

- Environmental impact of materials;
- Management of surface water run-off from developments;
- Storage of non-recyclable waste and recyclable household waste.

Four further mandatory issues need to be considered. The two issues with increasing mandatory minimum standards are:

- Dwelling emission rate and
- Indoor water use.

The final two issues with mandatory requirements are Fabric Energy Efficiency (Code Level 5&6) and Lifetime Homes (Code Level 6).

Failure to meet these will limit the maximum code level achievable, regardless of the number of credits achieved in the above sections.

Free-choice issues

Further credits are available on a free-choice or tradable basis from other issues so that it is possible to choose how to add performance credits in order to achieve the required rating.

Credits obtained are subject to a Weighting Factor to reflect the relative importance of each category. The largest weighting factor is for the energy section. The weighted final points score determines the code level achieved, provided all relevant mandatory minimum standards are met.

The following table summarises the minimum credit requirements to meet the various code levels.

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Code level	Minimum % reduction in dwelling emission rate (DER) from target emission rate (TER)	Maximum potable water consumption (litres per person per day)	Full compliance with lifetime homes criteria	Total points score (greater than or equal to)
LEVEL 1	0% (Compliance with Part L 2010)	120	-	36
LEVEL 2	0% (Compliance with Part L 2010)	120	-	48
LEVEL 3	0% (Compliance with Part L 2010)	105	-	57
LEVEL 4	25%	105	-	68
LEVEL 5	100%	80	-	84
LEVEL 6	Net Zero CO ₂ Emissions	80	✓	90

3.0 SCOPE OF THIS REPORT

A Code for Sustainable Homes (CSH) pre-Assessment for the 29 New End development has been undertaken. The ratings have been calculated for the development using the Code for Sustainable Homes pre-assessment calculator Rev 01_2010 and Technical Guidance as published on 11th November 2010.

The rating obtained in this pre-assessment is for guidance only. It is an initial estimation of the CSH score that would result should all the assumptions stated in this document be implemented in line with the requirements set out in the full CSH technical guidance.

Code assessments are carried out in three stages:

- **Step 1 is Pre-Assessment [current stage]**
- *Step 2 is Design Stage Assessment*
- *Step 3 is Post Construction Review*

For the Design Stage assessment individual dwelling types will have to be assessed and will be given an interim rating certificate. The final CSH Rating certificate will be awarded after the completion of the Post Construction Review. Under the Code for Sustainable Homes each individual dwelling requires its own assessment and rating.

Please note that for the subsequent Code for Sustainable Homes Design Stage Assessment, documentary evidence will be required that the measures stated in this document have been implemented. The Code for Sustainable Homes Technical Guidance must be referred to at all design stages.

4.0 ASSESSED RATING BREAKDOWN

An indicative pre-assessment has been formulated for a Unit 4 type and a Unit type 10. For CSH Level 3 at least 57 points from a total of 90 must be achieved. The assessed credits assumed in the score and associated weightings are shown in the score breakdown below.

Credit Allocation Table								
Category	Weighted value of each credit	Available	Potential Achieved		Percentage section credits achieved		Overall Weighted %	
			Unit 4	Unit 10	Unit 4	Unit 10	Unit 4	Unit 10
Energy/CO ₂	1.17	31	20.9	18.8	67.41	60.64	24.54	22.07
Water	1.50	6	4	4	66.66	66.66	6	6
Materials	0.30	24	12	12	50	50	3.6	3.6
Surface Water Run-off	0.55	4	2	2	50	50	1.1	1.1
Waste	0.8	8	6	7	75	87	4.8	5.6
Pollution	0.70	4	3	3	75	75	2.1	2.1
Health & Wellbeing	1.17	12	8	9	66	75	9.33	10.5
Management	1.11	9	9	9	100	100	10	10
Ecology	1.33	9	7	7	77	77	9.33	9.33
							70.80	70.30

ENERGY AND CO₂ EMISSIONS

A SAP calculation has been undertaken and it is anticipated that the development will achieve an average 26.4% improvement over Part L1A 2010 through the specification of a communal heating system serving all apartments. This will consist of high efficiency gas fired boilers and a combined heat and power unit (CHP).

In order to achieve the required 50% of credits in the Energy Category the facade parameters would need to be enhanced over minimum Building Regulation requirements to approx. following:

- Wall = 0.2 W/m²K;
- Window = 1.5 W/m²K;
- Roof = 0.18 W/m²K;
- Floor = 0.20 W/m²K;
- Pressures Test Rating: 5m3/h/m2@50Pa

The achievement of 2 credits for a 15% reduction in CO₂ emissions from low zero carbon a technology is anticipated through the specification of photovoltaic panels as detailed in the current energy strategy.

It will also be necessary to provide energy display devices on electrical and primary heating fuel systems. Drying space, A, A+ rated white goods and compliant security and space lighting will need to be provided,

The cycle storage shown on the architectural drawing NEN-PL-090 allocates a space for 22 bikes. This allows in average targeting 1 credit under the ENE 8 issue.

WATER

The requirements of CSH Level 3 state that water consumption of an individual dwelling cannot exceed 105 litres per person/per day. The target for daily water consumption will limit the selection of shower fittings, bath sizes, taps, toilet flushes etc. The table below summarises different scenarios of fittings specifications to meet the Code Level 3.

Appliance	Scenario 1	Scenario 2	Scenario 3	Scenario 4
WC	4/2.6 l (dual)	5/3 l (dual)	6/4 l (dual)	4 l (single)
Taps (excluding Kitchen Taps)	5 l/min	4 l/min	4 l/min	4 l/min
Bath	150 l	180 l	150 l	180 l
Shower	9 l/min	8 l/min	9 l/min	8 l/min
Kitchen Sink Taps	6 l/min	6 l/min	5 l/min	6 l/min
Washing Machine	8.17 l/kg	8.17 l/kg	7 l/kg	8.17 l/kg
Dishwasher	1.25 l/plate	1.25 l/plate	0.87 l/plate	1.25 l/plate
Predicted water consumption	105 l/p/d	105 l/p/d	105 l/p/d	105 l/p/d

It is anticipated that system collecting rainwater for the external irrigation of communal spaces will be provided.

MATERIALS

The roof, external walls, internal walls, upper and ground floors and windows will need to be specified to be greater than BRE Green Guide D rated and sufficient of these elements are A-D rated by volume to achieve 9 credits. The Green Guide ratings provide guidance on the relative environmental impact for a range of different building elemental specifications. The ratings are available online (<http://www.thegreenguide.org.uk/login.jsp>) and should be considered at the very outset of building elements design. Along with this it will be important to ensure that materials are responsibly sourced wherever possible.

SURFACE WATER RUN OFF

CSH contains a mandatory requirement that the new development does not lead to an increase in surface water run-off, this principle will be followed as far as possible within the drainage design but additional provision of SUDS (Sustainable Drainage Systems) is not anticipated to be required to achieve CSH Level 3***. A Flood Risk Assessment will be required as an evidence to confirm the site flood risk level.

WASTE

Storage will be provided for recyclable waste which is compatible with the local authority collection method. During construction the contractor will be required to ensure that waste is monitored and minimised where possible through a Site Waste Management Plan along with diversion of 50% of site waste from landfill. This demonstrates that in terms of waste management the scheme follows CSH requirements.

POLLUTION

The insulation materials will be selected to ensure that they have a Global Warming Potential (GWP) of less than 5 wherever possible. The gas boilers and CHP will be selected with consideration of the NOx emissions and low emission plant will be selected where possible in order to achieve at least 2 creditst.

HEALTH AND WELLBEING

Daylighting requirements of HEA 1 issue will be assessed and verified unit by unit during the detail design stage. Airborne sound insulation and impact sound insulation values should be at least 5 dB higher than those given in Approved Document E of the Building Regulations. To achieve further credits within the Health and Wellbeing category a private space will have to be provided for each dwelling. Private outdoor space is an area directly associated with an individual dwelling and its occupiers. This could be a private garden, a communal garden or courtyard, balconies, roof

terraces and patios. Minimum space requirements for outdoor space are:

- Private space: minimum 1.5 m² per bedroom;
- Shared space: minimum 1.0 m² per bedroom.

It is anticipated that further credits are to be achieved within the Lifetime Homes section.

MANAGEMENT

A user guide would be produced in order to ensure that the owners are fully acquainted with the services and systems within the development. Considerate Constructors will be a preference for the contractor to work to throughout construction as well as consideration and monitoring of impacts in terms of water and air pollution due to construction activity. It is anticipated that a Secured by Design award would be achievable.

ECOLOGY

The development is anticipated to have an ecological value. The landscaping scheme will have to be carefully designed with consideration for the incorporation of native species and enhancement of the ecology of the site with advice being sought from a qualified ecologist whose recommendations will be implemented within the scheme and is anticipated to provide a positive increase in ecological diversity. The multi-story nature of the development should be compliant with the achievement of 2 credits within Building Footprint Issue.

APPENDIX A

INDICATIVE CSH PRE-ASSESSMENT FOR 'UNIT 4'



Results

Development Name:	29 New End, Hampstead, London NW3
Dwelling Description:	Residential development - 15 units
Name of Company:	Hoare Lea
Code Assessor's Name:	Martina Bucakova
Company Address:	Energy House Bourne Valley Business Park Poole Dorset BH12 1TP
Notes/Comments:	Pre-assessment of a 'Unit 4' within the development.

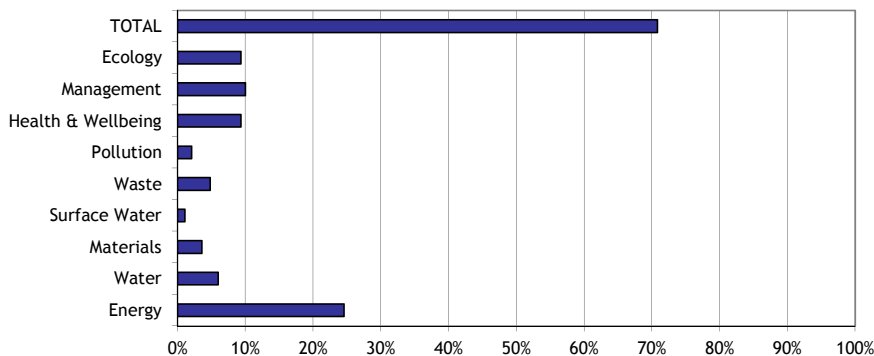
PREDICTED RATING - CODE LEVEL: 4

Mandatory Requirements: All Levels

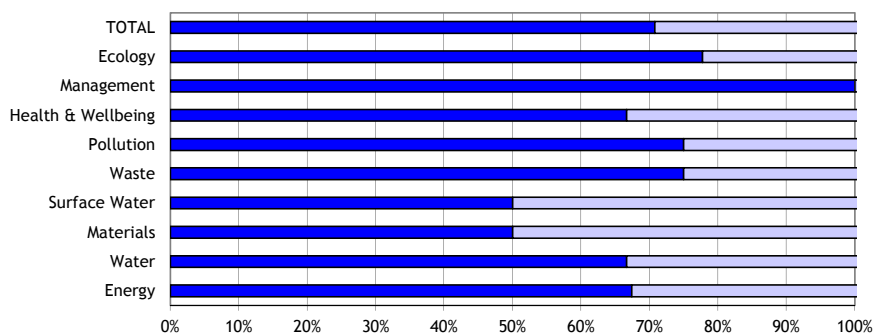
% Points: 70.80% - Code Level: 4

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 Credits 20.9 of 31 Credits	70.80 Level Level 4	Assumptions Made
% of Section Credits Predicted: 67.41 Contribution to Overall % Score: 24.54 points					
Ene 1 Dwelling Emission Rate	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. Enter the predicted score _____ What is the predicted number of credits? <input type="text" value="4.2"/> OR Are zero net CO ₂ emissions achieved? <input type="checkbox"/>	4.2 of 10 Credits	Level 4	The dwelling is required to exceed the requirements of Part L 2010 by 26.4%. This will be achieved as outlined by the energy strategy report.	
Ene 2 Fabric Energy Efficiency	Credits are awarded based on the Fabric Energy Efficiency (kWh/m ² /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. Enter the predicted score _____ Apartments, Mid-terrace <input checked="" type="radio"/> OR End terrace, Semi and Detached <input type="radio"/> OR Staggered Mid terrace <input type="radio"/> What is the predicted number of credits? <input type="text" value="4.7"/>	4.7 of 9 Credits	-		
Ene 3 Energy Display Devices	Credits are awarded where a correctly specified Energy Display Device is installed monitoring electricity and/or primary heating fuel consumption. Select whether the EDD monitors electricity and/or fuel _____ None Specified <input type="radio"/> Primary Heating only <input type="radio"/> OR Electricity only <input type="radio"/> OR Electricity and primary heating fuel <input checked="" type="radio"/>	2 of 2 Credits	-	It is anticipated that electricity and primary heating fuel monitoring will be provided.	
Issue		Credits	Level	Assumptions Made	
Ene 4 Drying Space	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. Will drying space meeting the criteria be provided? _____ Yes <input checked="" type="radio"/> OR No <input type="radio"/>	1 of 1 Credits	-	It is anticipated that drying space will be provided within the proposed unit.	
Ene 5 Energy Labelled White Goods	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. Select the appropriate option below _____ EU Energy labelling information only <input type="checkbox"/> A+ rated appliances <input type="checkbox"/> A+, A and B rated appliances <input type="checkbox"/> Combination of compliant rated white goods with EU Energy Labelling Scheme <input checked="" type="checkbox"/>	2 of 2 Credits	-	It is anticipated that all white goods provided within the dwellings will be A+, A rated and EU Energy Labelling Scheme details will be provided within the home user guide.	
Ene 6 External Lighting	Credits are awarded based on the provision of space lighting* with dedicated energy efficient fittings and security lighting fittings with appropriate control gear.. Space Lighting _____ None provided <input type="radio"/> OR Non Code compliant lighting <input type="radio"/> OR Code compliant lighting <input checked="" type="radio"/> Security Lighting _____ None provided <input type="radio"/> OR Non Code compliant lighting <input type="radio"/> OR Code compliant lighting and controls <input checked="" type="radio"/> Dual lamp luminaires _____ Compliant with both above criteria <input type="checkbox"/>	2 of 2 Credits	-	External lighting will be specified to be dedicated energy efficient fittings. Security lighting will be designed for energy efficiency and is adequately controlled such that: - all burglar security lights have a maximum wattage of 150 W; - movement detecting control devices (PIR); - daylight cut-off sensors.	
* Statutory safety lighting is not covered by this requirement					
Issue		Credits	Level	Assumptions Made	
Ene 7 Low or Zero Carbon Technologies	Credits are awarded where there is a 10% or 15% reduction in CO ₂ emissions resulting from the use of low or zero carbon technologies. Select % contribution made by low or zero carbon technologies _____ Less than 10% of demand <input type="radio"/> OR 10% of demand or greater <input type="radio"/> OR 15% of demand or greater <input checked="" type="radio"/>	2 of 2 Credits	-	15% reduction in CO ₂ emission resulting from use of CHP and PVs is anticipated.	
Ene 8 Cycle Storage	Credits are awarded where adequate, safe, secure and weather proof cycle storage is provided according to the Code requirements. Fill in the development details below _____ Number of bedrooms: <input type="text" value="1"/> Number of cycles stored per dwelling* <input type="text" value="1.0"/>	2 of 2 Credits	-	A compliant number of cycle spaces in a weatherproof secure location to be provided to achieve 2 Credits. For 1 bedroom flats - storage for 1 cycle per flat is required.	
* If you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles stored per dwelling					
Ene 9 Home Office	A credit is awarded for the provision of a home office. The location, space and services provided must meet the Code requirements. Will there be provision for a Home Office? _____ Yes <input checked="" type="radio"/> OR No <input type="radio"/>	1 of 1 Credits	-	It is anticipated that dedicated and adequate space for home office will be allocated.	

CATEGORY 2 WATER		Overall Level: 4	Overall Score	70.80	Assumptions Made
% 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> <div> <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> </div>	3 of 5 Credits	Level 3 AND Level 4		Internal water consumption will be limited to no more than 105 litres per person per day to comply with the minimum standard requirement for achievement of a 3*** rating
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> <div> <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> </div>	1 of 1 Credits	-		<p>It is anticipated that system collecting rainwater for external irrigation of communal gardens will be provided.</p> <p>Size requirements for communal gardens - 1 l/sqm of land allocated to the dwelling with a minimum of 200l per communal garden.</p>

CATEGORY 3 MATERIALS		Overall Level: 4	Overall Score	70.80	Assumptions Made
% of Section Credits Predicted: 50.00		Credits		Level	
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> <div><div>Will the mandatory requirement be met? <input checked="" type="checkbox"/></div><div>Enter the predicted score _____</div><div>What is the predicted number of credits? <input type="text" value="9"/></div></div>	9 of 15 Credits	All Levels	The mandatory requirement will be met along with elements having Green Guide 2008 ratings of average A to achieve additional tradable credits. The key elements of building elements are: Roof, External Walls, Internal Walls (including separating walls, Upper and Ground Floors (including separating floors), Windows. The Green Guide ratings available online (http://www.thegreenguide.org.uk/login.jsp) to be considered at the very outset of building elements design in order to achieve Mandatory requirements and targeted credits under MAT 1 issue.	
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> <div><div>What is the predicted number of credits? <input type="text" value="2"/></div></div>	2 of 6 Credits	-	The basic building elements are: frame, ground floor, upper floors, roof, external walls, internal walls, foundation/substructure, staircase. A minim of 5 elements must be assessed. A minimum 80% of an assessed element of each element must comply with Tiers 1 to 4. Additionally, 100% of any timber in these elements must be legally sourced.	
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> <div><div>What is the predicted number of credits? <input type="text" value="1"/></div></div>	1 of 3 Credits	-	The finishing elements are: stair, window, external&internal door, skirting, panelling, furniture, fascias. A minim of 5 elements must be assessed. A minimum 80% of an assessed element of each element must comply with Tiers 1 to 4. Additionally, 100% of any timber in these elements must be legally sourced.	

CATEGORY 4 SURFACE WATER RUN-OFF		Overall Level: 4	Overall Score	70.80	Assumptions Made
% 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>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. <u>Tradable Credits:</u> 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> <div> Will the mandatory requirement be met? <input checked="" type="checkbox"/> </div> <p>Select the appropriate option _____</p> <div> No SUDS <input type="checkbox"/> No runoff into watercourses for the first 5 mm of rainfall <input type="checkbox"/> Runoff from hard surfaces will receive an appropriate level of treatment <input type="checkbox"/> </div>	0 of 2 Credits	All Levels		Appointment of an appropriately qualified engineer or consultant is required to carry out the calculations and to prepare the appropriate Flood Risk Assessment.
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> <div> Zone 1 - Low <input checked="" type="radio"/> OR Zone 2 - Medium <input type="radio"/> OR Zone 3 - High <input type="radio"/> </div> <p>Select the appropriate option(s) _____</p> <div> Low risk of flooding from FRA** <input checked="" type="checkbox"/> All measures of protection are demonstrated in FRA <input type="checkbox"/> Ground floor level and access routes are 600 mm above design flood level <input type="checkbox"/> </div>	2 of 2 Credits	-		The Flood Risk Assessment to confirm the flood risk from all possible sources.
* Planning Policy Statement 25 - Planning and Flood Risk					
** FRA - Flood Risk Assessment					

CATEGORY 5 WASTE		Overall Level: 4	Overall Score	70.80	Assumptions Made
% of Section Credits Predicted: 75.00%		Credits		Level	
Contribution to Overall Score: 4.80 points		6 of 8 Credits	All Levels		
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> <div><div>Will the minimum space be provided and be accessible to disabled people?</div><div><input checked="" type="checkbox"/></div></div> <p>Internal Recyclable household waste storage</p> <div><div>Where there is no external recyclable waste storage and no Local Authority collection scheme</div><div>Internal storage (capacity 60 litres)</div><div><input type="checkbox"/></div></div> <p>Local Authority collection Scheme</p> <div><div>Post Collection sorting</div><div>Internal storage (capacity 30 litres)</div><div><input checked="" type="checkbox"/></div><div>Pre-collection sorting</div><div>Internal storage (3 separate bins, capacity 30 litres)</div><div><input type="checkbox"/></div></div> <p>External Storage, no Local Authority collection scheme</p> <div><div>3 separate internal storage bins (capacity 30 litres)</div><div><input type="checkbox"/></div><div>AND</div><div>Houses</div><div>External Storage(capacity 180 litres)</div><div><input type="checkbox"/></div><div>Flats</div><div>Private recycling operator</div><div><input type="checkbox"/></div><div>3 or greater types of waste collected</div><div><input type="checkbox"/></div></div>	0 of 2 Credits			
		4 of 4 Credits	All Levels		
		0 of 4 Credits			

Issue		Credits	Level	Assumptions Made
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> <p>SWMP details</p> <div> <div>Does the SWMP include:</div> <div>+ No SWMP</div> <div>+ SWMP with targets and procedures to minimise waste?</div> <div>+ SWMP with procedures to divert 50% of waste</div> <div>+ SWMP with procedures to divert 85% of waste</div> <div> <input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> </div> </div>	2 of 3 Credits		Compliant Site Waste Management Plant that contains target benchmarks for resource efficiency set in accordance with best practice, procedures and commitments to minimize non-hazardous construction waste, procedures for minimising hazardous waste, monitoring, measuring and reporting of hazardous and non-hazardous site waste according to the defined waste groups. At least 50% of non-hazardous construction waste has been diverted from landfill through either re-use on site or other sites, salvage/reclaim for re-use, return to the supplier via a 'take-back' scheme, compost, recovery and recycling using and approved waste management contractor.
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> <p>Select the facilities available</p> <div> <div>No composting facilities</div> <div>Individual composting facilities</div> <div>OR Communal/ community composting*?</div> <div>Local Authority</div> <div>OR Private with management plan</div> <div> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="checkbox"/> <input type="checkbox"/> </div> </div> <p>* including if an automated waste collection system is in place</p>	0 of 1 Credit	-	This credit is not sought.

CATEGORY 6 POLLUTION		Overall Level: 4	Overall Score	70.80	Assumptions Made
% of Section Credits Predicted: 75.00%		Credits		Level	
Contribution to Overall Score: 2.10 points		3 of 4 Credits		All Levels	
Pol 1 Global Warming Potential (GWP) of Insulants	<p>A credit is awarded where all 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> <div> <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	-		All insulation materials within the development will have a GWP of no greater 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> <div> <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 checked="" type="radio"/></p> <p>OR Less than 40 mg/kWh <input 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>	2 of 3 Credits	-		A suitable low Nox emission heating plant will be specified.

CATEGORY 7 HEALTH & WELLBEING		Overall Level: 4	Overall Score	70.80	Assumptions Made
% of Section Credits Predicted: 66.00%		Credits		Level	
Contribution to Overall Score: 9.33 points		8 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> <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 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> <p>Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.</p>	0 of 3 Credits	-		In order to achieve credits under ENE 9 Home office a min. DF of 1.5% must be achieved.
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> <p>Detached Property <input type="radio"/></p> <p>Attached Properties:</p> <p>- Separating walls and floors only exist between non habitable spaces <input type="radio"/></p> <p>- Separating walls and floors exist between habitable spaces <input checked="" type="radio"/></p> </div> <p>Select a performance standard</p> <div> <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	-		It is anticipated that the acoustic performance will be in compliance with a 5dB improvement over Part E.
Issue		Credits	Level	Assumptions Made	
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> <p>Will a private/ semi-private space be provided?</p> <div> <p>Yes, private/semi-private space will be provided <input checked="" type="radio"/></p> <p>OR No private/semi-private space <input type="radio"/></p> </div>	1 of 1 Credits	-		It is anticipated that private space will be provided. The private outdoor space could be a communal garden or courtyard, balconies, roof terraces or patios. The private space is to be used only by occupants of designated dwellings. Minimum space requirements for private space is 1.5sqm per bedroom; for shared communal space is 1sqm per bedroom.
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> <p>Mandatory Requirement</p> <div> <p>Dwelling to achieve Code Level 6? <input type="checkbox"/></p> </div> <p>Lifetime Homes Compliance</p> <div> <p>All Lifetime Homes criteria will be met <input checked="" type="radio"/></p> <p>OR Exemption from LTH criteria 2/3 applied <input type="radio"/></p> <p>Credit not sought <input type="radio"/></p> </div>	4 of 4 Credits	No level		Compliance with the requirements for Lifetime Homes is anticipated.

CATEGORY 8 MANAGEMENT		Overall Level: 4	Overall Score	70.80	Assumptions Made
% 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	-		A compliant home user guide will be provided to the dwelling. The Home User Guide is a guide to occupants of the dwelling containing necessary details about the everyday use of the home in a form that is easy to users to understand. The Home User Guide should be provided in an appropriate format for users. This might include translation into foreign languages, braille, large print or audio cassette/CD.
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>OR Best Practice: Score between 24 and 31.5 <input type="radio"/></p> <p>OR Best Practice+: Score between 32 and 40 <input checked="" type="radio"/></p> <p><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	-		The contractor will be required to achieve a score of at least 32 under the Considerate Constructors Scheme. The CCS is a UK certification scheme that encourages the considerate management of construction sites. The scheme is operated by the Construction Confederation and points are awarded in increments of 0.5 over the following eight sections: Considerate; Environmentally Aware; site Cleanliness; Good Neighbour; Respectful; Safe; Responsible; Accountable.
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>- CO₂/ energy use from site activities <input 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 checked="" type="checkbox"/></p> </div>	2 of 2 Credits	-		The contractor will be required to ensure the relevant targets and monitoring are undertaken during construction.
Issue		Credits		Level	Assumptions Made
Man 4 Security	<p>Credits are awarded for complying with Section 2 - Physical Security from Secured by Design - New Homes. An Architectural Liaison Officer (ALO), or alternative, needs to be appointed early in the design process and their recommendations incorporated.</p> <p>Secured by Design Compliance</p> <div> <p>Credit not sought <input type="radio"/></p> <p>OR Secured by Design Section 2 Compliance <input checked="" type="radio"/></p> </div>	2 of 2 Credits	-		

CATEGORY 9 ECOLOGY		Overall Level: 4	Overall Score	70.80	Assumptions Made
% of Section Credits Predicted: 77.00%		Credits		Level	
Contribution to Overall Score: 9.33 points		7 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> <div><p>Credit not sought <input type="radio"/></p><p>OR Land has ecological value <input checked="" type="radio"/></p><p>OR Land has low/ insignificant ecological value* <input type="radio"/></p></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	-	The development site is not anticipated to have a low ecological value. Suitably Qualified Ecologist will be appointed to confirm the ecological value of the construction zone.	
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><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	-	An ecologist will be consulted and their recommendations adopted to ensure enhancement of the ecology of the development site.	
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><p>Site with features of ecological value? <input checked="" type="radio"/></p><p>OR Site of low ecological value (as Eco 1)? <input type="radio"/></p><p>AND All* existing features potentially affected by site works are maintained and adequately protected? <input checked="" 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	-	Protection of existing features of ecological value is anticipated.	
Issue		Credits	Level	Assumptions Made	
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> <p>Change in Ecological Value _____</p> <div><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 type="radio"/></p><p>Minor enhancement: between +3 and +9 <input checked="" type="radio"/></p><p>Major enhancement: greater than 9 <input type="radio"/></p></div>	3 of 4 Credits	-	A minor enhancement in ecological value before and after development is anticipated.	
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> <p>Ratio of Net Internal Floor Area: Net Internal Ground Floor Area _____</p> <div><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 & Flats Weighted (2.5:1 & 3:1) <input type="radio"/></p><p>OR Houses & Flats Weighted (3:1 & 4:1) <input type="radio"/></p></div>	2 of 2 Credits		The 7 storey nature of the development should be compliant with the achievement of 2 credit.	

APPENDIX B

INDICATIVE CSH PRE-ASSESSMENT FOR 'UNIT 10'



Results

Development Name:	29 New End, Hampstead, London NW3
Dwelling Description:	Residential development - 15 units
Name of Company:	Hoare Lea
Code Assessor's Name:	Martina Bucakova
Company Address:	Energy House Bourne Valley Business Park Poole Dorset BH12 1TP
Notes/Comments:	Pre-assessment of a 'Unit 10' within the development.

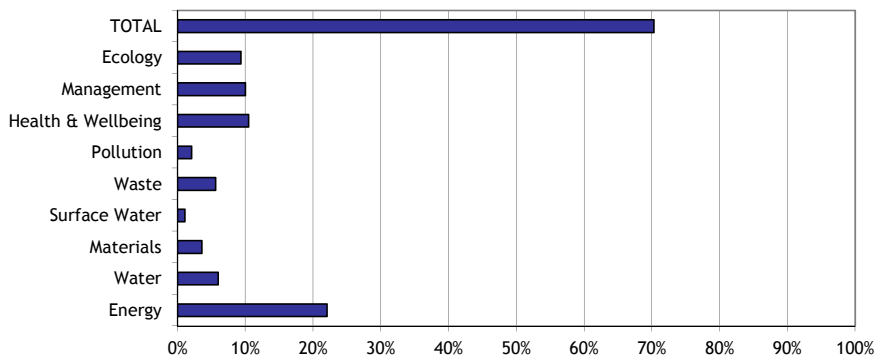
PREDICTED RATING - CODE LEVEL: 4

Mandatory Requirements: All Levels

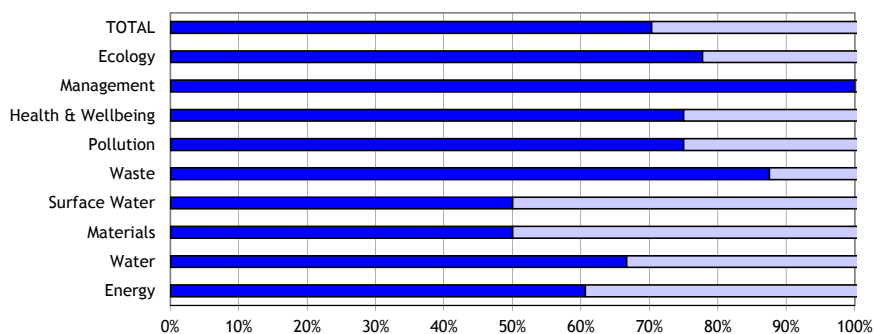
% Points: 70.30% - Code Level: 4

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.

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CATEGORY 1 ENERGY		Overall Level: 4	Overall Score Credits Level 4	70.30 Level 4	Assumptions Made
% of Section Credits Predicted: 60.64 Contribution to Overall % Score: 22.07 points			18.8 of 31 Credits		
Ene 1 Dwelling Emission Rate	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. Enter the predicted score _____ What is the predicted number of credits? <input type="text" value="4.2"/> OR Are zero net CO ₂ emissions achieved? <input type="checkbox"/>	4.2 of 10 Credits	Level 4		The dwelling is required required to comply with Part L 2010. This will be achieved as outlined by the energy strategy report.
Ene 2 Fabric Energy Efficiency	Credits are awarded based on the Fabric Energy Efficiency (kWh/m ² /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. Enter the predicted score _____ Apartments, Mid-terrace <input checked="" type="radio"/> OR End terrace, Semi and Detached <input type="radio"/> OR Staggered Mid terrace <input type="radio"/> What is the predicted number of credits? <input type="text" value="3.6"/>	3.6 of 9 Credits	-		
Ene 3 Energy Display Devices	Credits are awarded where a correctly specified Energy Display Device is installed monitoring electricity and/or primary heating fuel consumption. Select whether the EDD monitors electricity and/or fuel _____ None Specified <input type="radio"/> Primary Heating only <input type="radio"/> OR Electricity only <input type="radio"/> OR Electricity and primary heating fuel <input checked="" type="radio"/>	2 of 2 Credits	-		It is anticipated that electricity and primary heating fuel monitoring will be provided.
Issue		Credits	Level	Assumptions Made	
Ene 4 Drying Space	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. Will drying space meeting the criteria be provided? _____ Yes <input checked="" type="radio"/> OR No <input type="radio"/>	1 of 1 Credits	-	It is anticipated that drying space will be provided within the proposed unit.	
Ene 5 Energy Labelled White Goods	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. Select the appropriate option below _____ EU Energy labelling information only <input type="checkbox"/> A+ rated appliances <input type="checkbox"/> A+, A and B rated appliances <input type="checkbox"/> Combination of compliant rated white goods with EU Energy Labelling Scheme <input checked="" type="checkbox"/>	2 of 2 Credits	-	It is anticipated that all white goods provided within the dwellings will be A+, A rated and EU Energy Labelling Scheme details will be provided within the home user guide.	
Ene 6 External Lighting	Credits are awarded based on the provision of space lighting* with dedicated energy efficient fittings and security lighting fittings with appropriate control gear.. Space Lighting _____ None provided <input type="radio"/> OR Non Code compliant lighting <input type="radio"/> OR Code compliant lighting <input checked="" type="radio"/> Security Lighting _____ None provided <input type="radio"/> OR Non Code compliant lighting <input type="radio"/> OR Code compliant lighting and controls <input checked="" type="radio"/> Dual lamp luminaires _____ Compliant with both above criteria <input type="checkbox"/>	2 of 2 Credits	-	External lighting will be specified to be dedicated energy efficient fittings. Security lighting will be designed for energy efficiency and is adequately controlled such that: - all burglar security lights have a maximum wattage of 150 W; - movement detecting control devices (PIR); - daylight cut-off sensors.	
* Statutory safety lighting is not covered by this requirement					
Issue		Credits	Level	Assumptions Made	
Ene 7 Low or Zero Carbon Technologies	Credits are awarded where there is a 10% or 15% reduction in CO ₂ emissions resulting from the use of low or zero carbon technologies. Select % contribution made by low or zero carbon technologies _____ Less than 10% of demand <input type="radio"/> OR 10% of demand or greater <input type="radio"/> OR 15% of demand or greater <input checked="" type="radio"/>	2 of 2 Credits	-	15% reduction in CO ₂ emission resulting from use of CHP and PVs is anticipated.	
Ene 8 Cycle Storage	Credits are awarded where adequate, safe, secure and weather proof cycle storage is provided according to the Code requirements. Fill in the development details below _____ Number of bedrooms: <input type="text" value="4"/> Number of cycles stored per dwelling* <input type="text" value="2.0"/>	1 of 2 Credits	-	A compliant number of cycle spaces in a weatherproof secure location to be provided to achieve 1 Credits.	
* If you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles stored per dwelling					
Ene 9 Home Office	A credit is awarded for the provision of a home office. The location, space and services provided must meet the Code requirements. Will there be provision for a Home Office? _____ Yes <input checked="" type="radio"/> OR No <input type="radio"/>	1 of 1 Credits	-	Dedicated space for home office is allocated an it it anticipated that the location will meet all Code requirements for home office.	

CATEGORY 2 WATER		Overall Level: 4	Overall Score	70.30	Assumptions Made
% 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> <div> <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> </div>	3 of 5 Credits	Level 3 AND Level 4		Internal water consumption will be limited to no more than 105 litres per person per day to comply with the minimum standard requirement for achievement of a 3*** rating
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> <div> <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> </div>	1 of 1 Credits	-		<p>It is anticipated that system collecting rainwater for external irrigation of communal gardens will be provided.</p> <p>Size requirements for communal gardens - 1 l/sqm of land allocated to the dwelling with a minimum of 200l per communal garden.</p>

CATEGORY 3 MATERIALS		Overall Level: 4	Overall Score	70.30	Assumptions Made
% of Section Credits Predicted: 50.00		Credits		Level	
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> <div><div>Will the mandatory requirement be met?</div><div><input checked="" type="checkbox"/></div></div> <p>Enter the predicted score _____</p> <div><div>What is the predicted number of credits?</div><div>9</div></div>	9 of 15 Credits	All Levels	The mandatory requirement will be met along with elements having Green Guide 2008 ratings of average A to achieve additional tradable credits.	
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> <div><div>What is the predicted number of credits?</div><div>2</div></div>	2 of 6 Credits	-	The key elements of building elements are: Roof, External Walls, Internal Walls (including separating walls, Upper and Ground Floors (including separating floors), Windows. The Green Guide ratings available online (http://www.thegreenguide.org.uk/login.jsp) to be considered at the very outset of building elements design in order to achieve Mandatory requirements and targeted credits under MAT 1 issue.	
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> <div><div>What is the predicted number of credits?</div><div>1</div></div>	1 of 3 Credits	-	The basic building elements are: frame, ground floor, upper floors, roof, external walls, internal walls, foundation/substructure, staircase. A minim of 5 elements must be assessed. A minimum 80% of an assessed element of each element must comply with Tiers 1 to 4. Additionally, 100% of any timber in these elements must be legally sourced.	
				The finishing elements are: stair, window, external&internal door, skirting, panelling, furniture, fascias. A minim of 5 elements must be assessed. A minimum 80% of an assessed element of each element must comply with Tiers 1 to 4. Additionally, 100% of any timber in these elements must be legally sourced.	

CATEGORY 4 SURFACE WATER RUN-OFF		Overall Level: 4	Overall Score	70.30	Assumptions Made
% 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>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. <u>Tradable Credits:</u> 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> <div> <p>Will the mandatory requirement be met? <input checked="" type="checkbox"/></p> </div> <p>Select the appropriate option _____</p> <div> <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 type="checkbox"/></p> </div>	0 of 2 Credits	All Levels	Appointment of an appropriately qualified engineer or consultant is required to carry out the calculations and to prepare the appropriate Flood Risk Assessment.	
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> <div> <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> </div> <p>Select the appropriate option(s) _____</p> <div> <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> </div>	2 of 2 Credits	-	The Flood Risk Assessment to confirm the flood risk from all possible sources.	

* Planning Policy Statement 25 - Planning and Flood Risk

** FRA - Flood Risk Assessment

CATEGORY 5 WASTE		Overall Level: 4	Overall Score	70.30	Assumptions Made
% of Section Credits Predicted: 87.00%		Credits		Level	
Contribution to Overall Score: 5.60 points		7 of 8 Credits	All Levels		
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. Tradable Credits are awarded for adequate internal and/ or external recycling facilities.</p> <p>Mandatory Requirement</p> <div> <p>Will the minimum space be provided and be accessible to disabled people? <input checked="" type="checkbox"/></p> </div> <p>Internal Recyclable household waste storage</p> <div> <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> <p>Local Authority collection Scheme</p> <div> <p>Post Collection sorting</p> <p>Internal storage (capacity 30 litres) <input checked="" type="checkbox"/></p> <p>Pre-collection sorting</p> <p>Internal storage (3 separate bins, capacity 30 litres) <input type="checkbox"/></p> </div> <p>External Storage, no Local Authority collection scheme</p> <div> <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</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			Adequate storage for recyclable materials will be provided to ensure that all credits are achieved. A local authority collection scheme is in place which does not require recyclable waste to be sorted prior to collection - at least 30 l bin is required in an adequate internal space
		4 of 4 Credits	All Levels		
		0 of 4 Credits			

Issue		Credits	Level	Assumptions Made
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> <p>SWMP details</p> <div> <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>	2 of 3 Credits		Compliant Site Waste Management Plant that contains target benchmarks for resource efficiency set in accordance with best practice, procedures and commitments to minimize non-hazardous construction waste, procedures for minimising hazardous waste, monitoring, measuring and reporting of hazardous and non-hazardous site waste according to the defined waste groups. At least 50% of non-hazardous construction waste has been diverted from landfill through either re-use on site or other sites, salvage/reclaim for re-use, return to the supplier via a 'take-back' scheme, compost, recovery and recycling using and approved waste management contractor.
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> <p>Select the facilities available</p> <div> <p>No composting facilities <input type="radio"/></p> <p>Individual composting facilities <input checked="" type="radio"/></p> <p>OR Communal/ community composting*? <input type="radio"/></p> <p>Local Authority <input checked="" type="checkbox"/></p> <p>OR Private with management plan <input type="checkbox"/></p> </div> <p>* including if an automated waste collection system is in place</p>	1 of 1 Credit	-	This credit is not sought.

CATEGORY 6 POLLUTION		Overall Level: 4	Overall Score	70.30	Assumptions Made
% of Section Credits Predicted: 75.00%		Credits		Level	
Contribution to Overall Score: 2.10 points		3 of 4 Credits		All Levels	
Pol 1 Global Warming Potential (GWP) of Insulants	<p>A credit is awarded where all 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> <div> <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	-		All insulation materials within the development will have a GWP of no greater 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> <div> <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 checked="" type="radio"/></p> <p>OR Less than 40 mg/kWh <input 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>	2 of 3 Credits	-		A suitable low Nox emission heating plant will be specified.

CATEGORY 7 HEALTH & WELLBEING		Overall Level: 4	Overall Score	70.30	Assumptions Made
% of Section Credits Predicted: 75.00%		Credits		Level	
Contribution to Overall Score: 10.50 points		9 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> <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> <p>Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.</p>	1 of 3 Credits	-		The compliant daylight factors are anticipated in living and dining room. In order to achieve credits under ENE 9 Home office a min. DF of 1.5% must be achieved.
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> <p>Detached Property <input type="radio"/></p> <p>Attached Properties:</p> <p>- Separating walls and floors only exist between non habitable spaces <input type="radio"/></p> <p>- Separating walls and floors exist between habitable spaces <input checked="" type="radio"/></p> </div> <p>Select a performance standard</p> <div> <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	-		It is anticipated that the acoustic performance will be in compliance with a 5dB improvement over Part E.
Issue		Credits	Level	Assumptions Made	
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> <p>Will a private/ semi-private space be provided?</p> <div> <p>Yes, private/semi-private space will be provided <input checked="" type="radio"/></p> <p>OR No private/semi-private space <input type="radio"/></p> </div>	1 of 1 Credits	-		It is anticipated that private space will be provided. The private outdoor space could be a communal garden or courtyard, balconies, roof terraces or patios. The private space is to be used only by occupants of designated dwellings. Minimum space requirements for private space is 1.5sqm per bedroom; for shared communal space is 1sqm per bedroom.
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> <p>Mandatory Requirement</p> <div> <p>Dwelling to achieve Code Level 6? <input type="checkbox"/></p> </div> <p>Lifetime Homes Compliance</p> <div> <p>All Lifetime Homes criteria will be met <input checked="" type="radio"/></p> <p>OR Exemption from LTH criteria 2/3 applied <input type="radio"/></p> <p>Credit not sought <input type="radio"/></p> </div>	4 of 4 Credits	No level		Compliance with the requirements for Lifetime Homes is anticipated.

CATEGORY 8 MANAGEMENT		Overall Level: 4	Overall Score	70.30	Assumptions Made
% 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	-		A compliant home user guide will be provided to the dwelling. The Home User Guide is a guide to occupants of the dwelling containing necessary details about the everyday use of the home in a form that is easy to users to understand. The Home User Guide should be provided in an appropriate format for users. This might include translation into foreign languages, braille, large print or audio cassette/CD.
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>OR Best Practice: Score between 24 and 31.5 <input type="radio"/></p> <p>OR Best Practice+: Score between 32 and 40 <input checked="" type="radio"/></p> <p><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	-		The contractor will be required to achieve a score of at least 32 under the Considerate Constructors Scheme. The CCS is a UK certification scheme that encourages the considerate management of construction sites. The scheme is operated by the Construction Confederation and points are awarded in increments of 0.5 over the following eight sections: Considerate; Environmentally Aware; site Cleanliness; Good Neighbour; Respectful; Safe; Responsible; Accountable.
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>- CO₂/ energy use from site activities <input 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 checked="" type="checkbox"/></p> </div>	2 of 2 Credits	-		The contractor will be required to ensure the relevant targets and monitoring are undertaken during construction.
Issue		Credits		Level	Assumptions Made
Man 4 Security	<p>Credits are awarded for complying with Section 2 - Physical Security from Secured by Design - New Homes. An Architectural Liaison Officer (ALO), or alternative, needs to be appointed early in the design process and their recommendations incorporated.</p> <p>Secured by Design Compliance</p> <div> <p>Credit not sought <input type="radio"/></p> <p>OR Secured by Design Section 2 Compliance <input checked="" type="radio"/></p> </div>	2 of 2 Credits	-		

CATEGORY 9 ECOLOGY		Overall Level: 4	Overall Score	70.30	Assumptions Made
% of Section Credits Predicted: 77.00%		Credits		Level	
Contribution to Overall Score: 9.33 points		7 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> <div><p>Credit not sought <input type="radio"/></p><p>OR Land has ecological value <input checked="" type="radio"/></p><p>OR Land has low/ insignificant ecological value* <input type="radio"/></p></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	-	The development site is not anticipated to have a low ecological value. Suitably Qualified Ecologist will be appointed to confirm the ecological value of the construction zone.	
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><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	-	An ecologist will be consulted and their recommendations adopted to ensure enhancement of the ecology of the development site.	
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><p>Site with features of ecological value? <input checked="" type="radio"/></p><p>OR Site of low ecological value (as Eco 1)? <input type="radio"/></p><p>AND All* existing features potentially affected by site works are maintained and adequately protected? <input checked="" 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	-	Protection of existing features of ecological value is anticipated.	
Issue	Credits		Level	Assumptions Made	
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> <p>Change in Ecological Value</p> <div><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 type="radio"/></p><p>Minor enhancement: between +3 and +9 <input checked="" type="radio"/></p><p>Major enhancement: greater than 9 <input type="radio"/></p></div>	3 of 4 Credits	-	A minor enhancement in ecological value before and after development is anticipated.	
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> <p>Ratio of Net Internal Floor Area: Net Internal Ground Floor Area</p> <div><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 & Flats Weighted (2.5:1 & 3:1) <input type="radio"/></p><p>OR Houses & Flats Weighted (3:1 & 4:1) <input type="radio"/></p></div>	2 of 2 Credits		The 7 storey nature of the development should be compliant with the achievement of 2 credit.	