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Code for Sustainable Homes Pre Assessment Estimator Tool

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

csh@bre.co.uk

Background

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

Introduction

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

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

Instructions

1.0 Open the tool and save a working document

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

2.0 Entering the basic details and generic instructions

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

Save the file.

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

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

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

Assessment Estimator.

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

4.0 Understanding the spreadsheet headlines in each tab

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

5.0 Understanding and using the results

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

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

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Code for Sustainable Homes Pre Assessment Estimator Tool

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

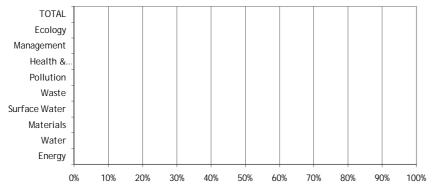
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Results	
Development Name:	
Dwelling Description:	
Name of Company:	
Code Assessor's Name:	
Company Address:	
Notes/Comments:	

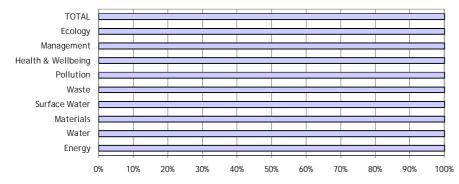
PREDICTED RATING - CODE LEVEL: 0

Mandatory Rec	uirements:	Not met
% Points: Breakdown:	0.00% Energy	- Code Level: No Level - Code Level: 3
	Water	- Code Level: No Level

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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CATEGOR	RY 1 ENERGY Overall Level: 0	Overall Score	0.00		Evidence Required
% of Sect	ion Credits Predicted: 0.00	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribut	tion to Overall % Score: 0.00 points	0.0 of 31 Credits	Level 3		required.)
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) calculated using SAP 2009. Minimum standards for each Code le apply. The Code energy calculator can be used to calculate predicted score.	as vel	Level 3		
Ene 2 Fabric Energy Efficiency	Credits are awarded based on the Fabric Energy Efficient (kWh/m ² /yr) of the dwelling. Minimum standards apply at Co levels 5 and 6. The Code energy calculator can be used to calcula a predicted score. Enter the predicted score Apartments, Mid-terrace OR End terrace, Semi and Detached OR Staggered Mid terrace What is the predicted number of credits? 0.0	ode	-		
Ene 3 Energy Display Devices	Credits are awarded where a correctly specified Energy Disp Device is installed monitoring electricity and/or primary heat fuel consumption. Select whether the EDD monitors electricity and/or fuel None Specified Primary Heating only OR Electricity only OR Electricity and primary heating fuel O	5	-		

Issue		Credits	Level	Assumptions Made	Evidence Required
	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 OR No	0 of 1 Credits	-		
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 A+ rated appliances A+, A and B rated appliances Combination of compliant rated white goods with EU Energy Labelling Scheme	0 of 2 Credits	-		
External	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 OR Non Code compliant lighting OR Code compliant lighting OR Security Lighting None provided Security Lighting None provided OR Code compliant lighting OR Compliant lighting and controls OR Dual lamp luminaires Compliant with both above criteria * Statutory safety lighting is not covered by this requirement 	0 of 2 Credits	-		

Issue		Credits	Level	Assumptions Made	Evidence Required
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 OR 10% of demand or greater OR 15% of demand or greater O	0 of 2 Credits	-		
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: Number of cycles stored per dwelling* * if you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles	0 of 2 Credits	-		
Ene 9 Home	stored per dwelling A credit is awarded for the provision of a home office. The location,				
Office	space and services provided must meet the Code requirements. Will there be provision for a Home Office? Yes OR NO	0 of 1 Credits	-		

CATEGOR	Y 2 WATER Overall Level: 0	Overall Score	0.00		Evidence Required
	on Credits Predicted: 0.00	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribut	ion to Overall Score: 0.00 points	0 of 6 Credits	No Level		required.)
Wat 1 Indoor Water Use	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. Select the predicted water use / Mandatory Requirement greater than 120 litres/ person/ day \bigcirc OR \leq less than 120 litres/ person/ day \bigcirc OR \leq less than 110 litres/ person/ day \bigcirc OR \leq less than 105 litres/ person/ day \bigcirc OR \leq less than 05 litres/ person/ day \bigcirc OR \leq less than 90 litres/ person/ day \bigcirc OR \leq less than 80 litres/ person/ day \bigcirc	0 of 5 Credits	No Level		
Wat 2 External Water Use	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. Select the scenario that applies No internal or communal outdoor space O OR Outdoor space with collection system O OR Outdoor space without collection system	0 of 1 Credits	-		

CATEGORY 3 MATERIALS Overall Level: 0		Overall Score	0.00		Evidence Required	
% of Secti	on Credits Predicted: 0.00		Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribut	ion to Overall Score: 0.00 points		0 of 24 Credits	No Level		required.)
Environm- ental Impact	Calculator can be used to predict a poter	2008 Rating of A+ to D. n a scale based on the ns. The Code Materials				
	Mandatory Requirement Will the mandatory requirement Enter the predicted score What is the predicted number		0 of 15 Credits	No Level		
a 1 6	Credits are awarded where materials us elements are responsibly sourced. Calculator can be used to predict a poter Enter the predicted Score What is the predicted number	The Code Materials ntial score.	0 of 6 Credits	-		
Mat 3 Responsible Sourcing of Materials - Finishing Elements	Credits are awarded where materials elements are responsibly sourced. Calculator can be used to predict a poter Enter the predicted Score — What is the predicted number	The Code Materials	0 of 3 Credits	-		

CATEGORY 4 SURFACE WATER RUN-OFF Overall Level: 0	Overall Score	0.00		Evidence Required
% of Section Credits Predicted: 0.00%	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribution to Overall Score: 0.00 points	0 of 4 Credits	No Level		required.)
Sur 1 Management of Surface Water Run- off from developments developments Management of Surface Water Run- off from developments Managements Management Manageme	e- of y tt h			
Wandatory Requirement				
No SUDS Image: Constraint of the second	0 of 2 Credits	No Level		
Sur 2 Credits are awarded where developments are located in area		NO Level		
Flood Risk 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 criter in the technical guide.	k e			
Zone 1 - LowImage: Comparison of the comp	0 of 2 Credits	-		
Select the apropriate option(s) Low risk of flooding from FRA** All measures of protection are demonstrated in FRA Ground floor level and access routes are 600 mm above design flood level				
* Planning Policy Statement 25 - Planning and Flood Risk ** FRA - Flood Risk Assessment				

CATEGORY 5	WASTE Overall Level: 0	Overall Score	0.00		Evidence Required
% of Section (Credits Predicted: 0.00%	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors
Contribution	to Overall Score: 0.00 points	0 of 8 Credits	No Level		if required.)
Storage of non-Sirecyclable waste and recyclable	andatory Requirement: The space provided for waste stora nould be sized to hold the larger of either all exter nould be sized to hold the larger of either all exter ontainers provided by the Local Authority or the min capace alculated from BS 5906. Tradable Credits alculated from BS 5906. Tradable Credits alculated from BS 5906. Tradable Credits alculated internal and/ or external recycling facilities. Mandatory Requirement	nal ity	No Level		
	External Storage, no Local Authority collection scheme 3 separate internal storage bins (capacity 30 litres) AND Houses External Storage(capacity 180 litres) Flats Private recycling operator 3 or greater types of waste collected	0 of 4 Credits			

Issue		Credits	Level	Assumptions Made	Evidence Required
Was 2 Construction Site Waste Management	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. SWMP details Does the SWMP include: + No SWMP + SWMP with targets and procedures to minimise waste? O + SWMP with procedures to divert 50% of waste + SWMP with procedures to divert 85% of waste O				
Was 3 Composting	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. Select the facilities available No composting facilities Individual composting facilities OR Communal/ community composting? Local Authority OR Private with management plan		-		

CATEGORY 6		Overall Score	0.00		Evidence Required
	Credits Predicted: 0.00% n to Overall Score: 0.00 points	Credits 0 of 4 Credits	Level All Levels	Assumptions Made	(The below cells can be formatted by assessors if required.)
Global su Warming of Potential	credit is awarded where <u>all</u> insulating materials on ibstances (in manufacture AND installation) that have a less than 5. Select the most appropriate option All insulants have a GWP less than 5 OR Some insulants have a GWP of less than 5 OR No insulants have a GWP of less than 5		-		
NOx the Emissions dv	redits are awarded on the basis of NOx emissions arising the operation of the space and water heating system within welling. Select the most appropriate option Greater than 100 mg/kWh OR Less than 100 mg/kWh OR Less than 70 mg/kWh OR Class than 40 mg/kWh OR Class 5 boiler OR Class 5 boiler OR All space and hot water energy requirements are met by systems who do not produce NOx emissions O		-		

CATEGORY 7 HEALTH & WELLBEING Overall Level: 0	Overall Score	0.00		Evidence Required
% of Section Credits Predicted: 0.00%	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribution to Overall Score: 0.00 points	0 of 12 Credits	No level		required.)
Hea 1 Daylighting Credits are awarded for ensuring key rooms in the dwelling have high daylight factors (DF) and a view of the sky. Select the compliant areas	0 of 3 Credits	-		
Hea 2 sound nsulation 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. Select a type of property O Attached Properties: - Separating walls and floors only exist between non habitable spaces O Select a performance standard Image: Select a performance standard Select a performance standard O Select a performance standard O OR Airborne: 5db higher; Impact: 5dB lower OR Airborne: 8db higher; Impact: 8dB lower	0 of 4 Credits	-		

Issue		Credits	Level	Assumptions Made	Evidence Required
Hea 3 Private Space	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. Will a private/ semi-private space be provided? Yes, private/semi-private space will be provided O OR No private/semi-private space •	0 of 1 Credits	-		
Hea 4 Lifetime Homes	Mandatory Requirement: Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6. Tradable credits: Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes scheme. Mandatory Requirement	0 of 4 Credits	No level		

CATEGORY 8 MANAGEMENT Overall Level: 0		Overall Score 0.00			Evidence Required	
% of Section Credits Predicted: 0.00%		Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if	
Contribution to Overall Score: 0.00 points		0 of 9 Credits	All Levels		required.)	
Man 1 Home User Guide	Credits are awarded where a simp dwelling covering information rel home occupier, in accordance with Tick the topics covered by the Home Use Operational Issues? Site and Surroundings? Is available in alternative	evant to the 'non-technical the Code requirements.		-		
Man 2 Considerate Constructors Scheme	Credits are awarded where there is with best practice site management Considerate Constructors Scheme or nationally recognised scheme. Select the appropriate scheme and score No scheme used <u>Considerate Constructors</u> OR Best Practice: Score betw OR Best Practice+: Score betw OR Best Practice+: Score betw OR Mandatory + 50% optiona OR Mandatory + 80% optiona	t principles using either the r an alternative locally/ S ween 24 and 31.5 O tween 32 and 40 O al requirements O al requirements O ervice Provider if you are	0 of 2 Credits	-		
Man 3 Construction Site Impacts	Credits are awarded where there is to operate site management proced Tick the impacts that will be addressed - <u>Monitor, report and applicable, for:</u> - CO ₂ / energy use from sit - CO ₂ / energy use from sit - water consumption from <u>Adopt best practice polic</u> - air (dust) pollution from - water (ground and surfac site <u>80% of site timber</u> is rec responsibly sourced	set targets, where set targets, where te activities te related transport o site activities cies in respect of: site activities cies in respect of: site activities ce) pollution on	0 of 2 Credits	-		

Issue		Credits	Level	Assumptions Made	Evidence Required
Man 4 Security	oreants are awarded for comprying with section 2 migsioar				
	Secured by Design Compliance Credit not sought OR Secured by Design Section 2 Compliance O	0 of 2 Credits	-		

CATEGORY 9 ECOLOGY Overall Level: 0	Overall Score	0.00		Evidence Required
% of Section Credits Predicted: 0.00%	Credits	Level	Assumptions Made	(The below cells can be formatted by assessors if
Contribution to Overall Score: 0.00 points	0 of 9 Credits	All Levels		required.)
Eco 1 Ecological Value of Site Value of Site Value of Site Value of Site Credit not sought OR Land has ecological value OR Land has low/ insignificant ecological value* * Low ecological value is determined either a) by using Checklist Eco 1 across the whole development site; or b) where an suitably gualified ecologist is	0 of 1 Credits	-		
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.				
Eco 2 Ecological Enhancement A credit is awarded where there is a commitment to enhance the ecological value of the development site. Tick the appropriate boxes Will a Suitably Qualified Ecologist be appointed to recommend appropriate ecological features?	0 of 1 Credits	-		
Eco 3 A credit is awarded where there is a commitment to maintain and adequately protect features of ecological value. Protection of Ecological Features Type and protection of existing features Site with features of ecological value? Image: Cological value? OR Site of low ecological value (as Eco 1)? AND All* existing features potentially affected by site works are maintained and adequately protected?	0 of 1 Credits	-		
*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.				

Issue		Credits	Level	Assumptions Made	Evidence Required
Change of Ecological Value of Site Maj OR Neu Min		0 of 4 Credits	-		
Building Footprint all dwellings of Ratio of Net Cre OR Hou OR Hou OR Hou	varded where the ratio of combined floor area of on the site to their footprint is: Internal Floor Area: Net Internal Ground Floor Area edit Not Sought uses: 2.5:1 OR Flats: 3:1 O uses: 3:1 OR Flats: 4:1 O uses & Flats Weighted (2.5:1 & 3:1) O uses & Flats Weighted (3:1 & 4:1) O	0 of 2 Credits			