

P / 2014 / 0094

P / 2013 / 0713

Code for Sustainable Homes
PRE ASSESSMENT ESTIMATOR TOOL

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Results

Development Name: Fairfield Farm, Barker's Lane, Borras, Wrexham (reg no.BRE-00022228-DS-001-00)

Dwelling Description: 1 no. Dwelling house

Name of Company: D Moore

Code Assessor's Name: Ian Hunter (CodeAssessors.net)

Company Address:

HAPC Ltd, 93 Parc Peter Sant, Llaneurgain, Yr Wyddgrug, Sir Yr Flint CH7 6YU

Notes/Comments:

The Pre-Assessment Estimator provides an illustration of how the dwelling(s) could achieve the relevant level of the Code for Sustainable Homes. The Pre-Assessment Estimator does not provide any assurances or confirmation that the any individual credit can be achieved. Additional works are required at the Design and Post Construction stages to enable formal assessment and certification to be obtained.

PREDICTED RATING - CODE LEVEL: 3

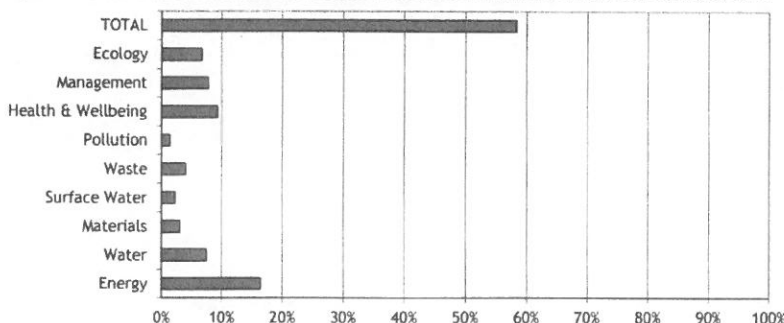
Mandatory Requirements: All Levels

% Points: 58.29% - Code Level: 3

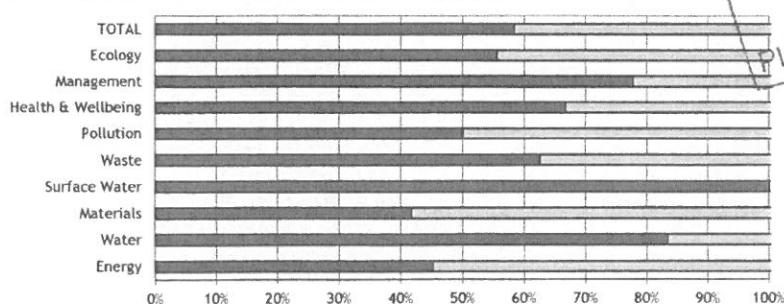
Breakdown: Energy - Code Level: 3

Water - Code Level: 4

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



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



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

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CATEGORY 1 ENERGY		Overall Level: 3	Overall Score	58.29	Level	Level 3	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 45.16 Contribution to Overall % Score: 16.43 points			14.0 of 31 Credits				1 Credit required for Wales	
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? 1.0 OR Are zero net CO₂ emissions achieved? ☐		1.0 of 10 Credits		Level 3			
Ene 2 Fabric Energy Efficiency	Credits are awarded based on the Fabric Energy Efficiency (kWh/m²/yr) of the dwelling. Minimum standards apply at Code levels 5 and 6. The Code energy calculator can be used to calculate a predicted score. Enter the predicted score _____ Apartment, Mid-terrace ☐ OR End terrace, Semi and Detached ☒ OR Staggered Mid terrace ☐ What is the predicted number of credits? 3.0		3.0 of 9 Credits			Assumptions Made as no SAP Calculations		
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 ☐ Primary Heating only ☐ OR Electricity only ☐ OR Electricity and primary heating fuel ☒		2 of 2 Credits					

Issue	Credits	Level	Assumptions Made	Evidence Required
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 ☒ No ☐ OR ☐	1 of 1 Credits	-	External Drying Space assumed	
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 ☐ A+ rated appliances ☒ A+, A and B rated appliances ☒ Combination of compliant rated white goods with EU Energy Labelling Scheme ☐	2 of 2 Credits	-	All Energy Efficient Appliances	
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 ☐ OR Non Code compliant lighting ☐ OR Code compliant lighting ☒ ☐ Security Lighting None provided ☐ OR Non Code compliant lighting ☐ OR Code compliant lighting and controls ☒ ☐ Dual lamp luminaires Compliant with both above criteria ☒ * Statutory safety lighting is not covered by this requirement	2 of 2 Credits	-	Assumed security lighting over main entrance, space lighting over patio area	

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 ☐	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: 3 Number of cycles stored per dwelling* 3.0 * If you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles stored per dwelling	2 of 2 Credits	-		
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 ☒ OR No ☐	1 of 1 Credits	-	Home Office provision made within one of the bedrooms.	

CATEGORY 2 WATER			Overall Level: 3	Overall Score	58.29	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 83.33			Overall Level: 3	Overall Score	58.29	
Contribution to Overall Score: 7.50 points			Overall Level: 3	Overall Score	58.29	Evidence Required (The below cells can be formatted by assessors if required.)
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.			Overall Level: 3	Overall Score	58.29	
Wat 1 Indoor Water Use			Overall Level: 3	Overall Score	58.29	Evidence Required (The below cells can be formatted by assessors if required.)
Select the predicted water use / Mandatory Requirement greater than 120 litres/ person/ day ☐ OR ≤ less than 120 litres/ person/ day ☐ OR ≤ less than 110 litres/ person/ day ☐ OR ≤ less than 105 litres/ person/ day ☐ OR ≤ less than 90 litres/ person/ day ☒ OR ≤ less than 80 litres/ person/ day ☐			Level 3 AND Level 4	4 of 5 Credits	58.29	
Wat 2 External Water Use			Overall Level: 3	Overall Score	58.29	Evidence Required (The below cells can be formatted by assessors if required.)
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 ☐ OR Outdoor space with collection system ☒ OR Outdoor space without collection system ☐			Level 3 AND Level 4	1 of 1 Credits	58.29	
Water Butt to be provided						

CATEGORY 4 SURFACE WATER RUN-OFF		Overall Level: 3	Overall Score	58.29	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted:	100.00%	Contribution to Overall Score:	2.20 points	Level	
		4 of 4 Credits	All Levels		
Sur 1 Management of Surface Water Run-off from developments	Mandatory Requirement: Peak rate of run-off into watercourses is no greater for the developed site than it was for the pre-development site and that the additional predicted volume of rainwater discharge caused by the new development is entirely reduced as far as possible in accordance with the assessment criteria. Designing the drainage system to be able to cope with local drainage system failure. Tradable Credits: Where SUDS are used to improve water quality of the rainwater discharged or for protecting the quality of the receiving waters. ☐ Mandatory Requirement ☒ Will the mandatory requirement be met? ☐ Select the appropriate option No SUDS ☐ No runoff into watercourses for the first 5 mm of rainfall ☒ Runoff from hard surfaces will receive an appropriate level of treatment ☒	2 of 2 Credits	All Levels		
Sur 2 Flood Risk	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. Select the annual probability of flooding (from PPS25*) Zone 1 - Low ☒ OR Zone 2 - Medium ☐ OR Zone 3 - High ☐ Select the appropriate 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 ☐	2 of 2 Credits		Assumed not within flood zone, but FRA to be completed at Design Stage.	

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

CATEGORY 5 WASTE		Overall Level: 3	Overall Score	58-29 Level	Evidence Required	
% of Section Credits Predicted: 62.00%		Contribution to Overall Score: 4.00 points	5 of 8 Credits	All Levels	(The below cells can be formatted by assessors if required.)	
Was 1 Storage of non-recyclable waste and recyclable household waste	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. Mandatory Requirement ☐ Will the minimum space be provided and be accessible to disabled people? ☒ Internal Recyclable household waste storage ☐ Where there is no external recyclable waste storage and no Local Authority collection scheme Internal storage (capacity 60 litres) ☐ Local Authority collection Scheme Post Collection sorting ☐ Internal storage (capacity 30 litres) ☒ Pre-collection sorting ☐ Internal storage (3 separate bins, capacity 30 litres) ☐ 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 2 Credits		Assumed Local Authority Collection scheme (several wheelie bins) and internal multi-part bin within the kitchen area.		
		4 of 4 Credits	All Levels			
		0 of 4 Credits				
Issue 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.				Overall development likely to be less than £300,000	Evidence Required

Was 3 Composting	SWMP details Does the SWMP include: + No SWMP ☒ + SWMP with targets and procedures to minimise waste? ☐ + SWMP with procedures to divert 50% of waste ☐ + SWMP with procedures to divert 85% of waste ☐ 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 ☐ * Including if an automated waste collection system is in place	0 of 3 Credits	1 of 1 Credit	
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CATEGORY 6 POLLUTION			Overall Level: 3	Overall Score	58.29
% of Section Credits Predicted: 50.00%			Contribution to Overall Score: 1.40 points	Credits	Level
				2 of 4 Credits	All Levels
Pol 1 Global Warming Potential (GWP) of Insulants	A credit is awarded where all insulating materials only use substances (in manufacture AND installation) that have a GWP of 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 ☒		0 of 1 Credits		
Pol 2 NOx Emissions	Credits are awarded on the basis of NOx emissions arising from the operation of the space and water heating system within the dwelling. Select the most appropriate option _____ Greater than 100 mg/kWh ☐ OR Less than 100 mg/kWh ☐ OR Less than 70 mg/kWh ☐ OR Less than 40 mg/kWh ☐ OR Class 4 boiler ☐ OR Class 5 boiler ☒ OR All space and hot water energy requirements are met by systems who do not produce NOx emissions ☐	Assumed Gas Boiler (generally Class 5)	2 of 3 Credits		

CATEGORY 7 HEALTH & WELLBEING		Overall Level: 3	Overall Score	58-29	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 66.00%		Contribution to Overall Score: 9.33 points	8 of 12 Credits	Level	
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 Room Kitchen: Avg DF of at least 2% ☒ Living Room*: Avg DF of at least 1.5% ☒ Dining Room*: Avg DF of at least 1.5% ☒ Study*: Avg DF of at least 1.5% ☒ 80% of working plane in all above rooms receive direct light from the sky? ☒ Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.	3 of 3 Credits	-	Elevations to be developed to ensure assumptions made	
Hea 2 Sound Insulation	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 Detached Property ☒ Attached Properties: - Separating walls and floors only exist between non habitable spaces ☐ - Separating walls and floors exist between habitable spaces ☐ Select a performance standard Performance standard not sought ☒ Airborne: 3db higher; Impact: 3db lower ☐ Airborne: 5db higher; Impact: 5db lower ☐ OR Airborne: 8db higher; Impact: 8db lower ☐	4 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 ☒ No private/semi-private space ☐ OR ☐	1 of 1 Credits			
Hea 4 Lifetime Homes <u>Mandatory Requirement:</u> Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6. <u>Tradable credits:</u> Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes scheme. ☐ Mandatory Requirement Dwelling to achieve Code Level 6? ☐ Lifetme Homes Compliance All Lifetime Homes criteria will be met ☐ OR Exemption from LTH criteria 2/3 applied ☐ Credit not sought ☒	0 of 4 Credits	No level		

CATEGORY 8 MANAGEMENT		Overall Level: 3	Overall Score	Level	Assumptions Made	Evidence Required (The below cells can be formatted by assessors if required.)
% of Section Credits Predicted: 77.00%		Contribution to Overall Score: 7.77 points	Credits 7 of 9 Credits	All Levels		
Man 1 Home User Guide	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. Tick the topics covered by the Home User Guide Operational Issues? ☒ Site and Surroundings? ☒ Is available in alternative formats? ☒	3 of 3 Credits	-			
Man 2 Considerate Constructors Scheme	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. Select the appropriate scheme and score No scheme used ☒ Considerate Constructors ☐ OR Best Practice: Score between 24 and 31.5 ☐ OR Best Practice+: Score between 32 and 40 ☐ Alternative Scheme* ☐ OR Mandatory + 50% optional requirements ☐ OR Mandatory + 80% optional requirements ☐ * In the first instance, contact a Code Service Provider if you are considering to use an alternative scheme.	0 of 2 Credits	-			
Man 3 Construction Site Impacts	Credits are awarded where there is a commitment and strategy to operate site management procedures on site as following: Tick the impacts that will be addressed Monitor, report and set targets, where applicable, for: - CO₂/ energy use from site activities ☐ - CO₂/ energy use from site related transport ☒ - water consumption from site activities ☒ Adopt best practice policies in respect of: - air (dust) pollution from site activities ☒ - water (ground and surface) pollution on site ☒ 80% of site timber is reclaimed, re-used or responsibly sourced ☐	2 of 2 Credits	-			

Issue	Credits	Level	Assumptions Made	Evidence Required
Man 4 Security 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. ☐ Secured by Design Compliance OR ☐ Credit not sought ☒ Secured by Design Section 2 Compliance	2 of 2 Credits	-		

CATEGORY 9 ECOLOGY		Overall Level: 3	Overall Score	58.29
% of Section Credits Predicted: 35.00%		Contribution to Overall Score: 6.66 points	Credits	Level
			5 of 9 Credits	All Levels
Eco 1 Ecological Value of Site	One credit is awarded for developing land of inherently low value. Select the appropriate option 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 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.	1 of 1 Credits	-	Assumptions Made (Ecologist to confirm)
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 <i>Suitably Qualified Ecologist</i> be appointed to recommend appropriate ecological features? ☒ AND Will all key recommendations be adopted? ☒ AND 30% of other recommendations be adopted? ☒	1 of 1 Credits	-	Ecologist to confirm whether credit achievable
Eco 3 Protection of Ecological Features	A credit is awarded where there is a commitment to maintain and adequately protect features of ecological value. Type and protection of existing features Site with features of ecological value? ☐ OR Site of low ecological value (as Eco 1)? ☒ AND All* existing features potentially affected by site works are maintained and adequately protected? ☐ *If a suitably qualified ecologist has confirmed that a feature can be removed due to insignificant ecological value or poor health conditions, as long as the rest have been protected, then this box can be ticked.	1 of 1 Credits	-	Ecologist to confirm whether credit achievable

Issue	Credits	Level	Assumptions Made	Evidence Required
Eco 4 Change of Ecological Value of Site Credits are awarded where the change in ecological value has been calculated in accordance with the Code requirements and is calculated to be: Change in Ecological Value Major negative change: fewer than -9 ☐ Minor negative change: between -9 and -3 ☐ Neutral: between -3 and +3 ☒ Minor enhancement: between +3 and +9 ☐ Major enhancement: greater than 9 ☐ OR Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is: Ratio of Net Internal Floor Area: Net Internal Ground Floor Area Credit Not Sought Houses: 2.5:1 OR Flats: 3:1 ☒ Houses: 3:1 OR Flats: 4:1 ☐ Houses & Flats Weighted (2.5:1 & 3:1) ☐ Houses & Flats Weighted (3:1 & 4:1) ☐	2 of 4 Credits		Ecologist to confirm whether credit achievable. Assumed additional planting to achieve requirements	
Eco 5 Building Footprint Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is: Ratio of Net Internal Floor Area: Net Internal Ground Floor Area Credit Not Sought Houses: 2.5:1 OR Flats: 3:1 ☒ Houses: 3:1 OR Flats: 4:1 ☐ Houses & Flats Weighted (2.5:1 & 3:1) ☐ Houses & Flats Weighted (3:1 & 4:1) ☐	0 of 2 Credits			