

The code for sustainable homes is an environmental assessment method specifically developed for residential developments. It is an extension of the Building Research Establishment's Environmental Assessment method (BREEAM) suite of tools and its contents are now developed by the Department of Communities and Local Government (DCLG) under the management of the BRE.

This flexible standard rewards positive steps to improve the environmental performance of housing in the UK. It considers the broad environmental concerns of climate change, resource use and impact on wildlife. It balances these against the need for a high-quality, safe and healthy internal environment. The standard goes beyond requirements expected by current SDS and Building Regulations.

Code for Sustainable Homes has 6 levels of achievement with mandatory requirements within certain issues and at different levels of attainment:

CODE FOR SUSTAINABLE HOMES RATING BANDS	
Level 1	36 Points
Level 2	48 Points
Level 3	57 Points
Level 4	68 Points
Level 5	84 Points
Level 6	90 Points

The Code for Sustainable Homes replaced EcoHomes 2006 in April 2007. The code seeks to minimise the adverse effects of new buildings on the environment at global and local scales, whilst promoting healthy indoor conditions for the occupants. The Code Assessment is specifically targeted at assessing new build housing developments.

This strategy considers many aspects of design and construction of the development and the following issues have been identified:

1. Energy Efficiency
2. Pollution
3. Construction Materials
4. Water Consumption
5. Ecological Aspects
6. Health and Wellbeing
7. Sustainable Management of the Proposed Development

			Compliant Areas: Kitchen: Avg DF greater than 2% All rooms have a few of the sky.
HEA 2 SOUND INSULATION	1 of 4 Credits	-	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. Performance standard: Airborne: 3db higher; Impact 3dB lower.
HEA 3 PRIVATE SPACE	1 of 1 Credits	-	One 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. Private/Semi-Private space will be provided.
HEA 4 LIFETIME HOMES	0 of 4 Credits	-	Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes Schemes. Credit not sought.
CATEGORY 3: MANAGEMENT		% OF SECTION CREDITS PREDICTED: 78%	
MAN 1 HOME USER GUIDE	3 of 3 Credits	-	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. The guide must be available in alternative formats on request. The topics covered by the Home User Guide are Operational Issues and Site and Surroundings.
MAN 2 CONSIDERATE CONSTRUCTORS SCHEME	2 of 2 Credits	-	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 Considerate constructors: Best Practice; Score equal to or above 32
MAN 3 CONSTRUCTION SITE IMPACTS	2 of 2 Credits	-	Credits are awarded where procedures meeting for Code requirements are in place for the following: Monitor, report and set targets for: - CO₂ / energy use from site activities - Water consumption from site activities Adopt best practice policies in respect of: - Air (dust) pollution from site activities - Water (ground and surface) pollution
MAN 4 SECURITY	0 of 2 Credits	-	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: Credit not sought.
CATEGORY 3: ECOLOGY		% OF SECTION CREDITS PREDICTED: 89%	
ECO 1 ECOLOGICAL VALUE OF SITE	1 of 1 Credits	-	One credit is awarded for developing land of inherently low value Land has low / insignificant ecological value.

			Appropriate attenuation will be provided from Hard Surfaces.
SUR 2 FLOOD RISK	2 of 2 Credits	-	Credits are awarded where developments are located in areas of low flood risk, or where areas of medium or high flood risk appropriate measures are taken to prevent damage to the property and its contents in accordance with Code Criteria. Appropriate Option: Low Flood Risk
CATEGORY 5: WASTE			% OF SECTION CREDITS PREDICTED: 86%
WAS 1 HOUSEHOLD WASTE STORAGE	4 of 4 Credits	All Mandatory Levels Achieved	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 minimum capacity calculated from BS 5906. Tradable Credits: Are awarded for adequate internal and/or external recycling facilities. Items that apply: The Minimum space will be provided Internal storage (30 litres) Local Authority Collection Scheme 3 types of waste or greater will be collected.
WAS 2 SITE WASTE MANAGEMENT PLAN / CONSTRUCTION WASTE	1 of 2 Credits	All Mandatory Levels Achieved	Mandatory Requirement: A SWMP Plan including the monitoring of waste generated on site and the setting of targets to promote resource efficiency must be produced and implemented. Tradable Credits: The SWMP should also include procedures and commitments for minimising waste and / or commitments to sort, reuse and recycle construction waste Contents of the SWMP: Monitoring of waste generated on site Targets to promote resource efficiency Procedures for minimising waste Commitments for minimising waste.
WAS 3 COMPOSTING	1 of 1 Credit	-	One 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 Individual composting facilities will be available
CATEGORY 6: POLLUTION			% OF SECTION CREDITS PREDICTED: 75%
POL 1 GLOBAL WARMING POTENTIAL (GWP) OF INSULANTS	1 of 1 Credit	-	One credit is awarded where all insulating materials have a Global Warming Potential (GWP) of less than 5. All Insulants have a GWP less than 5.
POL 2 NOx EMISSIONS	2 of 3 Credits	-	Credits are awarded on the basis of NOx emissions arising from the operation of the space heating system within the dwelling. Appropriate option: Class 5 Boiler
CATEGORY 7: HEALTH & WELLBEING			% OF SECTION CREDITS PREDICTED: 33%
HEA 1 DAYLIGHTING	2 of 3 Credits	-	Credits are awarded for ensuring key rooms in the dwelling have high daylight factors (DF) and a view of the sky.

ENE 8 STORAGE	2 of 2 Credits	-	Credits are awarded where safe, secure and weather proof cycle storage is provided according to the Code requirements. No of Bedrooms: 5 (Average) No of Cycles stored per dwelling: 4.0
ENE 9 HOME OFFICE	1 of 1 Credits	-	One credit is awarded for the provision of space for a home office. The location, space and services provided must meet the Code requirements. Will there be provision for a Home Office: Yes.
CATEGORY 2: WATER			% OF SECTION CREDITS PREDICTED: 67%
WAT 1 INTERNAL POTABLE WATER USE	3 of 5 Credits	Mandatory Level 3 and 4 Achieved	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. Predicted Water Use: Less than 105 litres / person/day
WAT 2 EXTERNAL POTABLE WATER USE	1 of 1 Credits	-	One 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. The scenario which applies: Outdoor space with collection system.
CATEGORY 3: MATERIALS			% OF SECTION CREDITS PREDICTED: 63%
MAT 1 ENVIRONMENTAL IMPACT OF MATERIALS	9 of 15 Credits	All Mandatory Levels Achieved	<u>Mandatory Requirement:</u> At least three of the five key building elements must achieve a Green Guide 2007 Rating of A+ to D. <u>Tradable Credits:</u> Points are awarded on a scale based on the Green Guide Rating of these specifications. The Code Materials Calculator can be used to predict a potential score. The predicted number of credits: 9
MAT 2 BUILDING ELEMENTS SOURCING	4 of 6 Credits	-	Credits are awarded where materials used in the key building elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score. Predicted number of credits: 4
MAT 3 FINISHING ELEMENTS SOURCING	2 of 3 Credits	-	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. Predicted number of credits: 2
CATEGORY 4: SURFACE WATER RUN OFF			% OF SECTION CREDITS PREDICTED: 75%
SUR 1 REDUCTION OF SURFACE WATER RUN-OFF FROM SITE	1 of 2 Credits	All Mandatory Levels Achieved	<u>Mandatory Requirement:</u> Peak run-off rates and annual run-off volumes post development must not exceed the previous conditions for the site. <u>Tradable Credits:</u> Where rainwater holding facilities / SUDs are used to provide attenuation of water run-off for the volumes required and in accordance with the Code Criteria. The mandatory requirement will be met.

CATEGORY 1 – ENERGY			% OF SECTION CREDITS PREDICTED: 52%
ENE 1 % DER Improvement over TER	5 of 15 Credits	Mandatory Level 3 Achieved	Credits are awarded based on the percentage improvement of the Dwelling Emission Rate (DER) over the Target Emission Rate (TER) as calculated using SAP 2005. Minimum standards for each code level apply. 25% Improvement Achieved
ENE 2 BUILDING FABRIC	1 of 2 Credits	-	Credits are awarded based on the Heat Loss Parameter (HLP) obtained from the SAP 2005 calculations. This is based on the level of insulation provided in the dwellings HLP Range: Less than or equal to 1.30
ENE 3 INTERNAL LIGHTING	2 of 2 Credits	-	Credits are awarded based on the percentage of dedicated energy efficient lighting provided in habitable spaces within the dwelling. % of dedicated energy efficient lighting: Greater than or equal to 75%
ENE 4 DRYING SPACE	1 of 1 Credit	-	One credit is awarded for the provision of either internal or external 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. Drying space to meet the criteria will be provided
ENE 5 ENERGY LABELLED WHITE GOODS	1 of 2 Credits	-	Credits are awarded where each dwelling is provided with either information about the EU Energy Labelling Scheme or White Goods with the ratings stated below: EU Energy labelling information.
ENE 6 EXTERNAL LIGHTING	Space Lighting: 1 of 1 Credit Security Lighting: 1 of 1 Credit	-	Credits are awarded based on the provision of space lighting with dedicated energy efficient fittings and security fittings and security lighting with appropriate control gear. Space Lighting: Code compliant lighting Security Lighting: None provided.
ENE 7 LOW OR ZERO CARBON TECHNOLOGIES	0 of 2 Credits	-	Credits are awarded where either 10% or 15% of the dwellings heating energy requirements (SAP 2005) are met by low or zero carbon technologies. Note that where funding has not been granted through the Low Carbon Buildings Programme, a feasibility study is required that meets the Code requirements. % Contribution made by low or zero carbon technologies: Less than 10% of demand.

ECO 2 ECOLOGICAL ENHANCEMENT	1 of 1 Credits	-	One credit is awarded where there is a commitment to enhance the ecological value of the development site. A suitable Qualified Ecologist will be appointed to recommend appropriate ecological features. All the key recommendations and 30% of the additional recommendations will be adopted.
ECO 3 PROTECTION OF ECOLOGICAL FEATURES	1 of 1 Credits	-	One credit is awarded where there is a commitment to maintain and adequately protect features of ecological value. The site is of low ecological value.
ECO 4 CHANGE OF ECOLOGICAL VALUE OF SITE	3 of 4 Credits	-	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: Minor enhancement: between +3 and +9
ECO 5 BUILDING FOOTPRINT	2 of 2 credits	-	Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is: All houses are three storeys, therefore building footprint ratio is 3:1

Code for Sustainable Homes
PRE ASSESSMENT ESTIMATOR TOOL

Background

Full Code for Sustainable Homes Technical Guidance can be downloaded from the Code for Sustainable Homes webpage at www.planningportal.gov.uk. If you notice any errors or experience any difficulties when using the tool, you can report the problem at cs@bre.co.uk writing Code Tools in the title or body of text.

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 type.

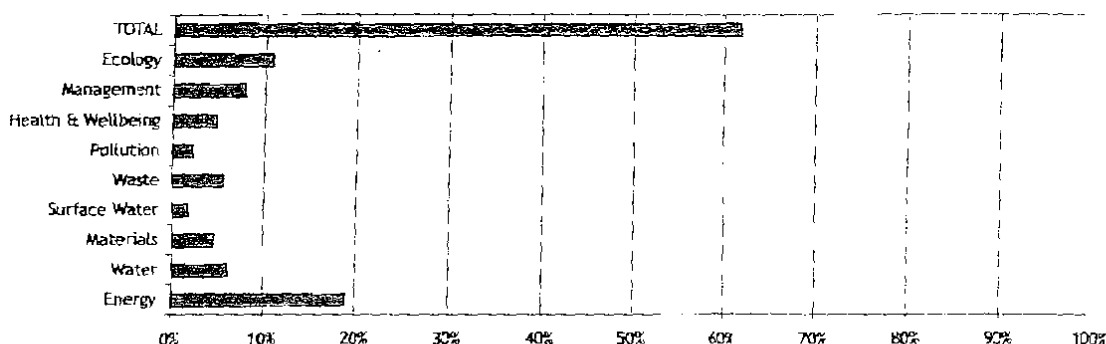
Several dwellings on the same site may achieve different levels and scores. Under a formal assessment, where there are any differences in how any of the credits are achieved, a new dwelling type must be created. However, a new pre-assessment estimator should only be created where there are changes between dwellings that affect any individual credit score.

Development Name: **Copethorne Crescent Fallowfield**
Dwelling Description: **Provisional Assessment of Detached House**

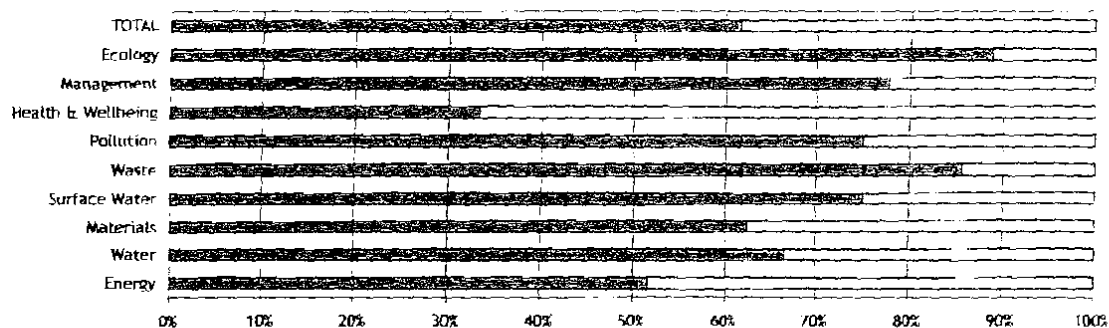
PREDICTED RATING - CODE LEVEL: 3

Breakdown: Energy - Code Level: 3 Mandatory Requirements: All met
Water - Code Level: 4 % Points: 61.67% - Code Level: 3

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



Graph 2: Predicted percentage of each credit and total score achievable



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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