

Code for Sustainable Homes Guidelines

A CSH rating is the responsibility of the Developer/ Architect and the Code Assessor and is achieved by scoring credits within 9 different categories;

- Energy & CO2 emissions; Water; Materials; Surface Water Run off; Waste; Pollution; Health & Wellbeing; Management; Ecology

Each individual category has sub-sections and is weighted as to overall environmental impact and sustainability.

Some sections within the CSH are mandatory and must be achieved. For example the Dwelling Emission Rate (DER) of each dwelling and the management of Construction Site waste.

Full details can be found in the Code for Sustainable Homes Technical Guide;

http://www.planningportal.gov.uk/uploads/code_for_sustainable_homes_techguide.pdf

The CSH process is carried out by an Approved Assessor in two stages:

- Design Stage – leading to an interim certificate
- Post Construction Stage – leading to Final certificate

Design Stage Assessment

The assessment is based on detailed design drawings for each dwelling. Drawings and specification will need more detail than a traditional Building Regs submission and will need to include details such as sanitary fittings, waste management, water use, site ecology etc.

At this stage we will work closely with the design team to ensure that the mandatory elements are met and that the overall Level required will be achieved. This can be through use of some tradable credits.

We will then assemble and compile all evidence and make our submission to our accreditation body for Design Stage certification to be issued.

Our submission needs to contain documented evidence from 'appropriately qualified persons' to demonstrate that the performance requirements are being met together with a clear audit trail to specification clauses, drawings, reports and other evidence.

Post Construction Stage Assessment

This assessment confirms that dwellings are either built as per specification or that if revisions have taken place that they are documented, reassessed and that a new Code Level is established.

At this stage we will confirm that all commitments made by the developer have been met and that appropriate formal documented evidence is available.

Again we will compile all documentation, reports and other evidence for submission to our accreditation body for Final Post Construction certification to be issued.

Category 1 – Energy & CO₂ Emissions

ENE 1 Dwelling Emission Rate – 15 available credits and is a Mandatory element.

Credits are based on the percentage improvement over current Building Regs. This is determined by the SAP/ Part L calculations. Minimum requirement for CSH Level 3 is achieved by a 25% improvement.

The evidence required would be found in the Part L/ SAP worksheets from the accredited SAP assessor.

ENE 2 Building Fabric – 2 available credits.

Credits are based on the reduction of heat losses across the whole dwelling (Heat loss parameter).

The evidence required would be obtained from the Part L/ SAP worksheets.

ENE 3 Internal Lighting – 2 available credits.

Credits are awarded for the provision of fixed low-energy light fittings.

The information required should be available from architectural drawings and specification text.

ENE 4 Drying Space – 1 available credit.

A credit is available for a suitable drying space either inside or outside the dwelling.

The allocated space should be shown clearly on architectural drawings and written in the specification text.

ENE 5 Energy Labelled White Goods – 2 available credits.

Credits are awarded for the use of low energy household appliances that reduce the overall CO₂ emissions from the dwelling.

Details of household appliances should be written into the specification giving the rating under the EU Energy Efficiency Labelling Scheme.

ENE 6 External Lighting – 2 available credits.

Credits are awarded to encourage the use of low energy external lighting.

Details and location of all external Space and Security lighting should be shown on architectural drawings. Confirmation of light fittings and efficacy is required.

ENE 7 Low or Zero Carbon Technologies – 2 available credits.

To encourage local energy generation from renewable sources with credits based on the percentage reduction of total carbon emissions that result from use of low carbon technologies.

The specific evidence required is set out on Page 77 of the CSH Technical Guide.

ENE 8 Cycle Storage – 2 available credits.

To encourage the use of bicycles for short car journeys, credits are awarded where adequately sized, safe, secure, weatherproof cycle storage is provided.

Details of location, size and access to cycle storage to be shown on drawings and within specification text.

ENE 9 Home Office – 1 available credit.

To encourage working from home and to reduce the reliance on cars for commuting, credits are awarded for the provision of space and services that enable a home office.

Architects drawings and specification to identify the location and specific allocated space together with sockets, phone points, availability of broadband.

Category 2 – Water

WAT 1 Indoor water use – 5 available credits and is a Mandatory element.

Credits are awarded for the reduction of potable water through the increased use of water efficient fittings, appliances and water recycling stems.

Drawings and specification text should detail the location and type of appliances/ fittings including the capacity and flow rates. This is often found within manufacturer's literature.

WAT 2 External water use – 1 available credit.

A credit is available for the provision of a permanent rainwater collection system to reduce the use of potable water irrigation for outdoor use.

Architectural drawings or specification text to detail the type, size and location of the collection system.

Category 3 – Materials

MAT 1 Environmental Impact of Materials – 15 available credits and is Mandatory.

At least three of the five key elements of the building envelope (Roof, External walls, Internal walls, Floors and Windows) must achieve a BRE Green Guide rating of A+ to D. Full details on Page 110 of the CSH Technical Guide.

Architectural drawings or specification text detailing materials to be used within the element. Reference should be made to the Green Guide and its rating system.

MAT 2 Responsible sourcing of Materials (Basic Elements) – 6 available credits.

Credits are gained for use of responsibly sourced materials to the key building elements. This would include areas such as foundations and substructure through to the frame, walls and roof.

The full assessment criteria is set out on Page 116 of the CSH Technical Guide together with a schedule of the evidence required on Page 117 and 118.

MAT 3 Responsible sourcing of Materials (Finished Elements) – 3 available credits.

Credits are awarded for the use of responsibly sourced material to the finished elements. This would include areas such as stairs, skirting, furniture etc.

The full assessment criteria is set out on Page 131 of the CSH Technical Guide together with a schedule of the evidence required on Page 132 and 133.

Category 4 – Surface Water Run-off

SUR 1 Management of Surface Water from Developments – 2 available credits and is Mandatory
Credits are awarded for the reduction of localised flood risk and consequential environmental damage.

Evidence must be supplied from a 'suitable qualified person' in relation to 'Peak Rate Runoff' and 'Volume Runoff' in the form of a Flood Risk Assessment. Full details are on Page 139-141 of the CSH Technical Guide. Reference should also be made to SUDS guide.

SUR 2 Flood Risk – 2 available credits.

Credits are awarded to encourage developments in low flood risk areas or when a Flood Risk Assessment can show that appropriate measures have been taken to ensure flood resilient and resistant construction.

Evidence required will be a Flood Risk Assessment prepared by a 'suitably qualified person' to show a low risk of flooding in Zone 1 areas or written confirmation from the Environment Agency confirming suitable flood defences within Zones 2 and 3.

Category 5 – Waste

WAS 1 Storage of recyclable and non-recyclable waste - 4 credits available and is Mandatory.
Credits are awarded for the provision of adequate and accessible internal and external facilities for recyclable and non-recyclable household waste. The full criteria is set out on Page 155-156 of the CSH Technical Guide.

Evidence of the number, size, type and location of waste storage should be detailed in architectural drawings or specification text. Also required is evidence of Local Authority collection and recycling schemes.

WAS 2 Construction Site Waste Management – 2 available credits and is Mandatory.

Credits are based on the reduction and effective management of construction waste through use of a Site Waste Management Plan (SWMP). Full details are on Page 163 of the CSH Technical Guide.

Documented evidence of the SWMP will be required. For developments of less than £300k we will need written confirmation of the construction cost.

WAS 3 Composting – 1 credit available.

A credit is awarded if home composting facilities are provided or if a Local Authority or other community scheme is present. Facilities should account for food, green/ garden and normal domestic waste.

Details of a specific undertaking by the developer as to the size and location of the storage together with details of access and an information booklet.

Category 6 – Pollution

Pol 1 Global Warming Potential (GWP) of Insulants – 1 credit available.

In order to reduce the damage caused by the manufacture of foamed insulation materials, a credit is gained by use of insulants with a GWP of <5.

Details of proposed insulation and its GWP should be shown on drawings or within the specification. Confirmation from the developer that the specification is unchanged.

Pol 2 NO_x Emissions – 3 available credits.

Credits are awarded in relation to the reduction of NO_x emissions from space and water heating. This is linked to the efficiency rating and class of the boiler.

Details of the heating system and proposed boiler should be shown on architectural drawings or within the specification text.

Category 7 – Health & Wellbeing

Hea 1 Daylighting – 3 credits available.

Credits are gained by improving the amount of daylight entering the dwelling whilst reducing the reliance on energy to light the home.

Details of the size and orientation should be shown on architectural drawings.

Hea 2 Sound Insulation – 4 credits available.

Credits are awarded for achieving higher standards than those set out in Building Regs Part E by use of pre completion testing or Robust details.

Details of the commitment to meet the relevant sound insulation levels should be shown on drawings or within the specification text. If use of Robust details are to be used, there should be completed checklists for all relevant constructions.

Hea 3 Private Space – 1 credit available.

A credit can be gained by providing an outdoor space that is partially private for personal use. This could be a private garden, roof terrace, balcony or courtyard.

Details of the size and location of the area should be given on drawings or within the specification. This space should meet the minimum size requirements and be accessible to wheelchairs.

Hea 4 Lifetime Homes – 4 credits available and is mandatory for Level 6.

Credits can be gained by building homes that are accessible and easily adaptable to meet the changing needs of current and future occupants.

The developer/ architect will need to complete the Lifetime Homes Checklist given on Page 214-218 of the CSH Technical Guide.

Category 8 – Management

Man 1 Home User Guide – 3 credits available.

Credits are gained by the provision of a simple user guide that informs the occupant of the operation and environmental performance of the home. Details could cover the operation of the heating system or security system as well as information on the surrounding area. Full details are given Page 222-224 of the CSH Technical Guide.

A commitment is required from the Developer that a formal user guide will be supplied to all dwellings within the development.

Man 2 Considerate Constructors Scheme – 2 credits available.

Credits are awarded when the developer commits to Best Practice site management as set out by the Construction Confederation. This would include areas such as site cleanliness, consideration to neighbours, safety etc.

Evidence will be required of inclusion in the Considerate Constructors Scheme together with details set out in specification text.

Man 3 Construction Site impact - 2 credits available.

Credits are available when the developer commits to operating the site in a manner that reduces environmental impact. This could include the monitoring of site water, the reduction of site waste and use of reclaimed timber.

Evidence will be required within specification text or as a letter of intent from the developer to commit to specific undertaking.

Man 4 Security – 2 credits available.

Credits are achieved by complying with compliance to Section 2 – Physical Security from ‘Secured by Design – New Homes’. The aim is to develop housing in which people feel safe and secure from crime and the fear of crime.

Evidence and report from an Architectural Liaison Officer or Crime Prevention Design Advisor offering advice to meet the ‘Secured by Design – New Homes’ requirements. This advice will then be incorporated into the specification.

Category 9 – Ecology

Eco 1 Ecological Value of the Site – 1 credit available.

Credits are awarded to encourage development on sites of low ecological value and to discourage development of ecologically valuable sites.

An early assessment of the site's ecological value will need to take place. If the site is found to have ecological value a ‘Suitably Qualified Ecologist’ will need to submit a Verified Ecological Report. Full details on Page 244 of the CSH Technical Guide.

Eco 2 Ecological Enhancement – 1 credit available.

A credit can be gained by making a commitment to enhance the ecological value of the site.

A report from a Qualified Ecologist will clearly outline such items as planting schedules, animal habitats and layouts.

Eco 3 Protection of Ecological Features – 1 credit available.

A credit is awarded to encourage the protection of existing features of ecological value during site clearance, preparation and construction.

Written and photographic evidence will be required to demonstrate that existing ecological features are being protected and maintained.

Eco 4 Change in Ecological Value of the Site – 4 credits available.

Credits are awarded when the ecological value of the site is improved by the introduction of species habitat.

Drawings and site layouts will need show proposed landscaping and planting schedules.

Eco 5 Building Footprint – 2 credits available.

Credits can be gained by demonstrating efficient use of a building's footprint by ensuring that land and material use is optimised. Full details of the criteria are set out on Page 269 of the CSH Technical Guide.

Evidence of such will be shown on general layout drawings.