



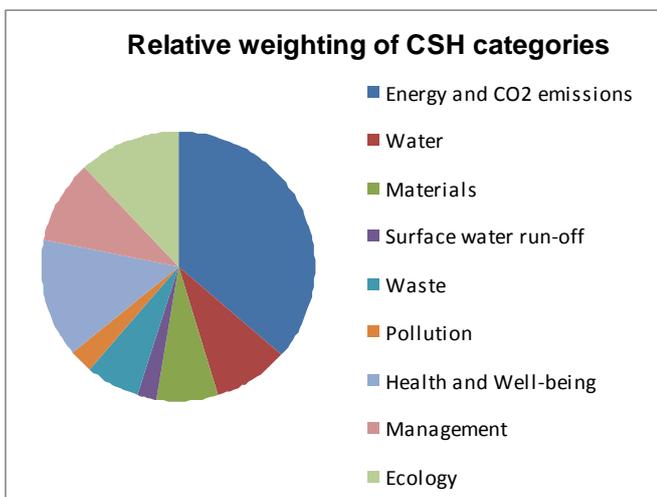
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Cumbria Factsheet | Code for Sustainable Homes

Achieving Code for Sustainable Homes – Cumbrian Examples

What is the Code for Sustainable Homes?

Code for Sustainable Homes (CSH) is an optional standard for new build housing in England, Wales and Northern Ireland. It allows formal recognition of dwellings that are built above the requirements of current Building Regulations and that seek to reduce their environmental impacts through energy, water and resource efficient design. Homes are rated on a scale of 1 to 6, with 6 representing the greatest sustainability and zero carbon status. It is anticipated that all new build homes will be required to achieve “zero carbon” ratings by 2016.



CSH consists of 9 assessment categories, as shown here. For each category a number of approaches can be taken to improve the sustainability of a home. Some are mandatory and others are optional. For example – ‘Energy and CO₂ emissions’ has two mandatory issues (Dwelling Emission Rate and Fabric Energy Efficiency) and seven further items which are optional, such as cycle storage and provision for working from home. Each option is awarded credits.

Current Building Regulations (2010) are equivalent to CSH Level 3. Additional energy and resource efficiency measures need to be designed in to

achieve the higher code levels. It has recently been announced that “zero carbon” (Level 6) will no longer take into account emissions related to cooking or appliances.

Which code level?

Local authorities can require new build homes to be more efficient than current Building Regulations through the development of policies that require a certain level of the CSH being met. Alternatively, the code level you want to achieve will depend on the nature of your development and your budget. Some credits are relatively easy to achieve, such as energy efficient lighting and external clothes drying facilities. Others need to be designed in at the outset for overall cost effectiveness, such as energy sources, day lighting and enhancing ecology. The code level is awarded following a formal assessment which takes place after construction and requires substantiation by additional assessments for some issues.

Case Study One – Highthwaite, Greystoke

(Information courtesy of The Green Building Site)

Under construction in 2011, Highthwaite is a new build single dwelling in a Cumbrian village location and adjacent to a listed building.

Code Features

The building design includes high levels of insulation and air tightness, mechanical heat recovery ventilation, low energy lighting and rain water harvesting. Renewable energy generation through photovoltaics is also included.



It is anticipated that the home will meet the “zero carbon” Code Level 6.

A short video case study of this development can be found at www.cumbriagreenbuild.org.uk

Case Study Two – Barras Close, Carlisle

(Information courtesy of Lovell Partnerships Ltd)

Constructed for Riverside Housing, Barras Close is located in Carlisle and consists of 43 affordable homes – a mixture of 4, 3 and 2-bedroom houses and 2-bedroom bungalows. The development was completed in 2011, complies with Code Level 3, and exceeds minimum Building Regulations.

Code Features

The following features accrued credits towards the code rating of the development:

Building efficiency - thermal performance of the building fabric, sound insulation and level of daylighting; NO_x emissions minimised through use of highly efficient gas boilers.

Water, energy, waste and transport - all properties have features to reduce water usage (low volume bath, low flow shower and toilets, flow restrictors on taps); solar hot water systems; internal and external low energy lighting; recycling facilities; external drying space; cycle storage; water butts and compost bins. 4-bedroom dwellings also have rainwater harvesting systems. A home user

guide is provided for each dwelling, which details local area information.

Site design – each property has some private outside space and advice was taken on security issues; the site was flood risk evaluated and measures taken in relation to surface water run off; the ecological value of site was assessed.

Construction site related - responsible sourcing of materials and consideration of their environmental impacts; participation in the Considerate Constructors scheme; control of construction site impacts and waste management.



Where can I find out more information?

Department of Communities and Local Government www.communities.gov.uk Code documents and technical guidance	Planning Portal www.planningportal.gov.uk Online planning and building regulations resource
BRE - Building Research Establishment 01923 664462 www.breeam.org BREEAM guidance and information	Cumbria Action for Sustainability 01768 210276 www.cumbriagreenbuild.org.uk Local suppliers, case studies, events and training



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Please note: the information provided in this factsheet is guidance only, for use at the client's discretion. We in no way guarantee that should the information be acted upon, that planning permission would be granted or refused. It is recommended that you consult with your local planning authority to ensure that local planning requirements are fully addressed prior to any development.

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