6. The Code for Sustainable Homes

The Code for Sustainable Homes was launched in December 2006 with the publication of "Code for Sustainable Homes: A step change in sustainable home building practice."

This introduced a single national standard to be used in the design and construction of new homes in England, based on BRE's EcoHomes© scheme. It aims to encourage continuous improvement in sustainable home building.

A more detailed technical guide was made available in April 2007.

What the Code is for

The Code for Sustainable Homes is designed to provide an all-round measure of the sustainability of new homes, ensuring that sustainable homes deliver real improvements in key areas such as CO_2 emissions and water use.

The government recognises that improving the way in which houses are built is vital to the success of its strategy to cut CO_2 emissions:

"The UK government is committed to cutting CO_2 emissions by 60% by 2050 in relation to 1990 levels and to act on climate change. At the same time it is also committed to building more houses, more sustainably. Building sustainable homes is about more than just carbon dioxide. We also need to build and use our homes in a way that minimises their other environmental impacts, such as the water they use, the waste they generate, and the materials they are built from." *Code for Sustainable Homes – A step change in sustainable home building practice, Department of Communities and Local Government.*

Performance areas

Nine categories are defined. The chart (below) indicates the relative importance of each category to achieving a rating.

The performance targets proposed for each category are more demanding than those required by Building Regulations, but are considered to be best practice, technically feasible, and within the capability of the building industry.

How the Code works

The Code uses a rating system of one to six stars which differs from EcoHomes in several key ways:

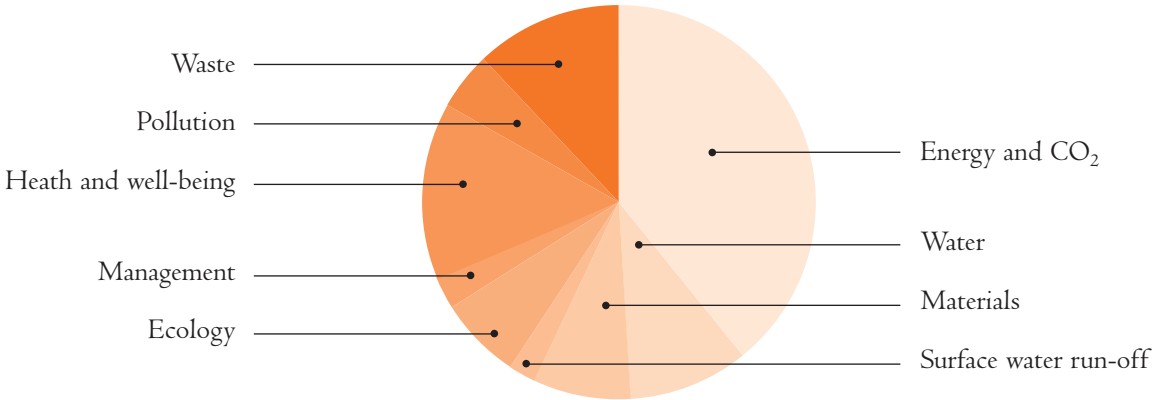
- It is assessed at the level of an individual 'dwelling' (defined in Section 4.3) rather than a complete development
- Even the lowest rating of the Code can only be achieved once minimum mandatory standards for energy, water, materials, waste and surface water run-off have been met
- Higher ratings can only be achieved once higher minimum standards for energy and water have been met
- It is performed in two stages, with 'Final' Code certification taking place after a Post Construction Review has been carried out.

In addition to the mandatory requirements, each of the nine design categories scores a number of percentage points. The total number of percentage points establishes the 'star rating' for the dwelling.

Within these nine categories, performance criteria are defined for the individual issues which are described in detail, together with the requirements for verification in Section Two of the technical guide.

The Code applies to individual dwellings, overall site issues, shared issues (applicable to some dwellings on a site) or a combination of the three.

For example - bicycle storage may apply to individual dwellings or as a shared facility; surface water run-off may apply to all three; materials apply to individual dwellings.



Briefing Note 6: The Code for Sustainable Homes

Star ratings

The Code has six levels:

★ Code Level 1: A higher standard than Building Regulations, equivalent to BRE's EcoHomes PASS level and the Energy Saving Trust's Good Practice Standard for energy efficiency

★★ Code Level 2: Broadly equivalent to BRE's EcoHomes GOOD level

★★★ Code Level 3: Broadly equivalent to BRE's EcoHomes VERY GOOD level and the EST's Best Practice Standard for energy efficiency

★★★★ Code Level 4: Broadly set at current exemplary performance

★★★★★ Code Level 5: Based on exemplary performance with high standards of energy and water efficiency

★★★★★★ Code Level 6 (the Zero Carbon house): An aspirational standard based on zero carbon emissions for the dwelling and a high performance across all environmental categories.

Mandatory standards

There are mandatory minimum standards required for six of the nine categories:

1. CO_2 emissions from operational energy consumption – calculated using SAP 2005
2. Potable water consumption
3. Embodied impacts of construction materials
4. Surface water run off
5. Construction site waste management
6. Household waste storage space and facilities.

The two main categories that affect timber are:

CO_2 emissions from operational energy consumption – calculated using SAP 2005 (TERs).

This is mainly related to the fabric of the building and Target Emission Rates (TERs) and applies to overall building performance of walls, roof and windows etc.

Embodied impacts of construction materials.

There are three ways in which timber and timber products can assist in gaining credits:

1. 'Environmental impact of products/materials' by using at least 'D' rating (A*, A or B rated products give higher points) shown in the Green Guide to Housing Specification*
2. 'Responsible sourcing of materials' (Certification/Chain of Custody proof) for basic elements, e.g. roof, walls, windows
3. 'Responsible sourcing of materials' (Certification/Chain of Custody proof) for finishing elements, e.g. stairs, skirting, architraves.

*** The revised Green Guide for Housing Specification is due to be published in May 2008.**

Assessment

Formal assessment of dwellings using the Code for Sustainable Homes may only be carried out using licensed and registered individuals, who are qualified 'competent persons' for the purpose of carrying out Code assessments.

Training, registration and licensing of these individuals is carried out by the Building Research Establishment according to a UKAS registered 'competent persons scheme' and under ISO 14001 and ISO 9001. BRE also carries out quality assurance of the assessments and issues certificates on behalf of communities and local government.

Further information

Further information on the Code for Sustainable Homes can be obtained from

The Planning Portal
www.planningportal.gov.uk/england/professionals/en/1115314116927.html

TRADA – Construction Briefings - Code for Sustainable Homes (CSH) - A Summary of How the Scheme Works (pdf)