

Raising house-building standards for homebuyers



Code for Sustainable Homes

Tracking and Working with the Code

Michelle Wangusi Sustainability Product Manager



- Technical Guide
 - process
 - scoring system
 - detailed credit requirements
 - reference material

available from Planning Portal



Code for Sustainable Homes

Technical Guide







- Process:
- "..make system ... as **simple**, **transparent** and **rigorous** as possible, process that **inspires confidence** .. in assessors, builders, manufacturers and consumers"



Code for Sustainable Homes

Technical Guide







- Assessors
 - licensed & registered
 - training, registering & licensing by BRE
 - UKAS registered 'competent persons scheme'
- BRE
 - QA & Certify Code Ratings





Assessment Process

Enquiry - Quotation - Appointment
Initial Guidance
Information exchange -> Design Stage report
DSA report submitted to BRE
Interim 'dwelling type' certificate of compliance

Documentation collation on site

Assessor site visit - first visit/dwelling type

PCS stage report submitted to BRE

Final 'dwelling' certificate issued



Assessment Process

Design Stage

- design drawings, specifications, developer commitments
- results in interim certificate of compliance



Post Construction Review

- confirmation of compliance:

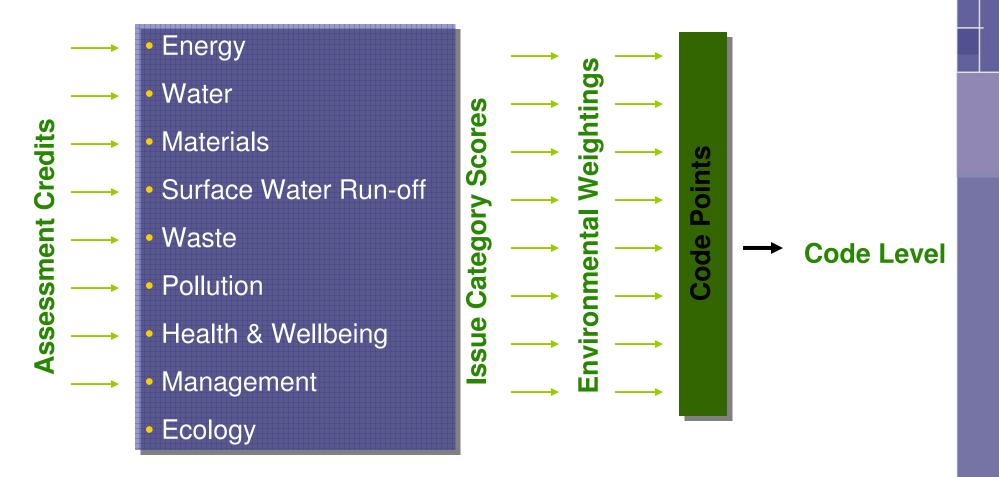
Documentary (As-built drawings/spec, purchase orders/receipts Photographic

Visual inspection (Assessor site survey)

- Code certificate awarded at this stage



What makes up a Code assessment?





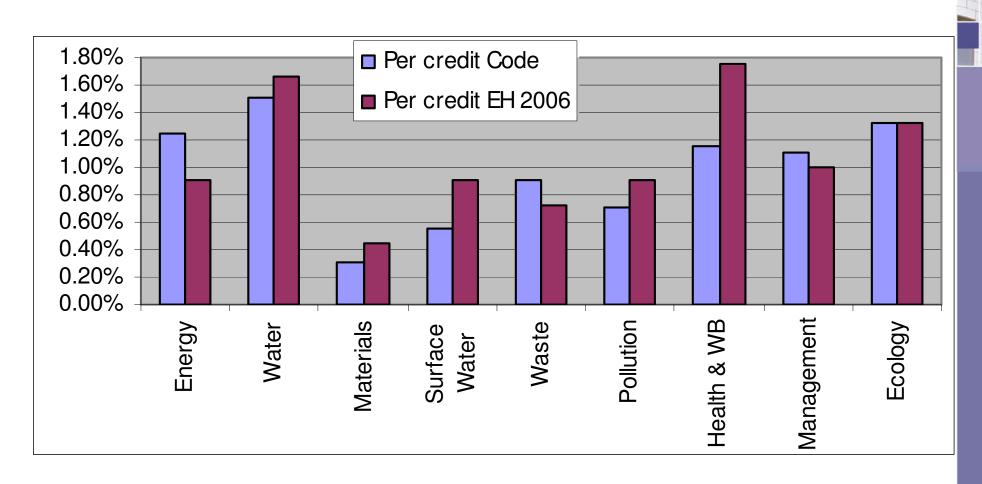
Code categories

Categories	# Credits	Weighting Factor
Energy	29	36.4%
Water	6	9.0%
Materials	24	7.2%
Surface Water Run Off	4	2.2%
Waste	7	6.4%
Pollution	4	2.8%
Health & Well-Being	12	14.0%
Management	9	10.0%
Ecology	9	12.0%
9 Categories; 34 Issues	104 Credits	100%



The Scoring

Environmental Weightings: Code V's EcoHomes





Summary: The Code Vs EcoHomes

- Technical content remains very similar
- Principle difference: addition of minimum standards for Energy and Water efficiency at each level of the Code (1 to 6)
- Minimum Code entry standards for Materials, Surface Water Run-off and Waste categories
- Design Stage and Post Construction Assessment stages.
- Assessment carried out on a 'House Type' basis rather than development wide
- Location issues such as Transport and Amenities credits have been removed from the Code
- Category weightings have changed slightly

Technical Guide - Credit Criteria

- Title of Credit
- Aim
- Assessment Criteria (incl default cases)
- Information Required to Demonstrate Compliance (design stage & post construction stage)
- Relevant Definitions
- Assessment Methodology

Category 6 Pollution

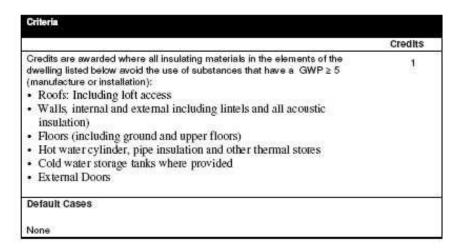
Category 6 Pollution

Issue ID	Description	No. of credits available	Mandatory Elements	
Pol 1	Global Warming Potential (GWP) of Insulants	1	No	

Aim

To reduce global warming from blowing agent emissions arising from the manufacture, installation, use and disposal of foamed thermal and acoustic insulating materials.

Assessment Criteria





Pol 1: Global Warming Potential of Insulants

 Aim: Reduce global warming arising from use of thermal & acoustic insulating materials

Criteria: all insulating materials in following elements avoid use of substances with GWP ② 5

Roofs - incl loft access

Walls - internal, external, lintels, acoustic insulation

Floors - ground & upper

HW cylinder, pipe insulation, cold water storage tanks

External doors



Pol 1: Global Warming Potential of Insulants

- Compliance Evidence Required Design stage:
- 1. completed checklist listing all insulants
- 2. drawings showing type & location of all insulation materials
- 3. text on drawings or in spec describing type & location of above
- 4. For all foamed materials/blowing agents manufacturers/installers literature confirming all blowing materials have GWP < 5

Element	Insulation Material Details			
	Manufacturer and tradename (e.g. Kingspan Thermawall TW50 zeroODP)	Type of material(s) if known (e.g. mineral wool/ polyurethane etc.)	Dwelling type(s) where used (state 'ALL' where applicable)	Provide specification clause and drawing ref.
External walls	Rockwool	Mineral wool quilt	AII	See specification and sections
Internal walls (partitions and party walls)	No insulation	No insulation	All	See specification and sections
External doors	IG	Expanded (bead) polystyrene	All	See specification and sections
Window lintels	Catnic	Expanded (bead) polystyrene	All	See specification



Pol 1: Global Warming Potential of Insulants

- Compliance Evidence Required Post Construction Stage:
- 1. Written confirmation that materials in checklist unchanged

OR

2. As-built drawings showing type & location of all insulation materials

OR

3. Assessor site survey

AND

4. Copies of purchase orders/receipts for all foamed insulating materials



Hea 2: Sound Insulation

 Aim: to ensure provision of improved sound insulation to reduce liklihood of noise complaints from neighbours

Criteria: performance standard - higher than AD E; demonstrated by PCT or Robust Details

1 credit 3dB better

3 credits 5dB better

4 credits 8dB better

Default cases:

detached dwellings - 4 credits;

attached dwellings with separating walls/floors only between non-habitable rooms - 3 credits



Hea 2: Sound Insulation

Compliance Evidence Required - Design stage:

Text (on drawings or in specification) confirming commitment to meet relevant performance levels

AND

- 1. Details of PCT, including groups & sub-groups
- 2. Brief details of separating and flanking constructions, + evidence of potential to meet performance standards (e.g. design statement from acoustic consultant)
- 3. Commitment to perform remediation and re-testing
- 4. Confirmation that PCT Test Body is UKAS accredited
- **OR** Robust Details purchase statement



Hea 2: Sound Insulation

Compliance Evidence Required - Post Construction Stage:

PCT

- Copies of field test results and/or letter confirming required performance levels have been achieved. This is to be provided by the Test Body.
- 2. Evidence that Test Body is UKAS accredited (or 'deemed to satisfy')

Robust Details

1. Completed Robust Details checklist for all relevant constructions



Summary - Key points

Get advice early

Be aware of level of detail required in specification & on drawings - Assessor needs 'audit trail' of evidence

Assessment not complete until dwelling has its post construction certificate => must ensure design is fully implemented on site

...HOWEVER....



Some changes are allowed... (so long as criteria still met)

Wat 2: External Water Use

Actual





Thank you

contact details:

Michelle Wangusi

NHBC Sustainability Services

mwangusi@nhbc.co.uk

01908 746405

