

CIBSE – Housing Standards Debate

How will the removal of the Code for Sustainable Homes affect the delivery of sustainable housing development?

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Throwing the code out?





Department for
Communities and
Local Government

Code for
Sustainable Homes

Statistical Release

November 2014

Code for Sustainable Homes:

Cumulative and Quarterly Data for England, Wales
and Northern Ireland up to end of September 2014

- There were 183,814 post construction stage certificates and 278,646 design stage certificates issued up to 30th September 2014.
- 32% of homes with post construction certificates and 44% of those with design stage certificates have been built for the private sector. 68% of homes with post construction certificates and 56% of those with design stage certificates have been built for the public sector.
- Between April 2007 and September 2014, 200,882 dwellings at the design stage received a three star rating and 71,314 dwellings received a four star rating.

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Responsible statistician:

Are homes more sustainable now compared to
2007?

What will happen with the removal of the code?





"The fire seems to be drawing well."



Top 10 issues to be addressed

(that are missed by HSR)

- Post construction performance – focussing on energy and comfort
- Indoor air quality (part F fit for purpose?)
- Daylight/sunlight (planning ok, but indoor daylight?)
- Sound – (could be part E improvement?)
- Thermal Comfort – (overheating)
- Aftercare/soft landings/warranties (RIBA stage 7? EnPC)
- Durability?
- Ecology?
- Materials – sustainably sourced, environmental impact, embodied energy?
- Construction – site impacts, waste management – other regs?

Consistent theme....

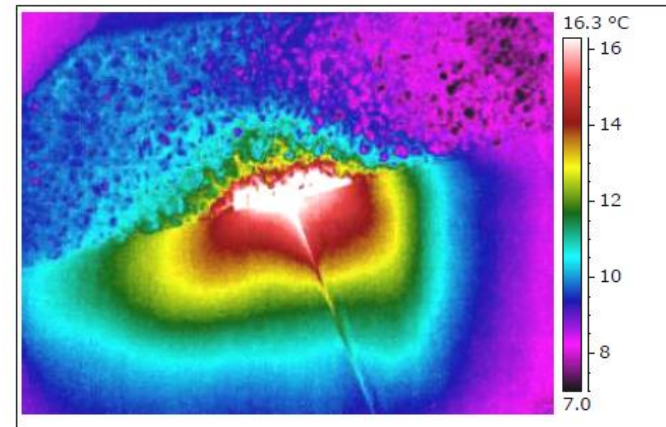
Performance



- Zero Carbon Hub performance gap study 2012 ongoing
- 21 sites around UK – analysing the gap in terms of SAP baseline.
- Detailed site inspections, technical review, interviews of whole project team, thermography and air-testing
- Gap was 15% - 50% worse than design (conservative figure)
- How can we tackle this?
- Simple regulations, incentives?
- QA – ZCH developers...
- Building control vs. code assessors?

THERMOGRAPHIC IMAGE LOCATION 4

IMAGE SHOWS POTENTIAL AIR LEAKAGE INTO ROOF STRUCTURE



DIGITAL IMAGE



Labelling

- Clearer labelling
- De-regulation can only work to improve situation if the replacement is clearer, more flexible, with a customer focussed performance based targets
- “A” or “B” rated EPC – what does it mean? Re-calibrate? Clearer?
- Code 5 vs. Passivhaus?

Energy Performance Certificate



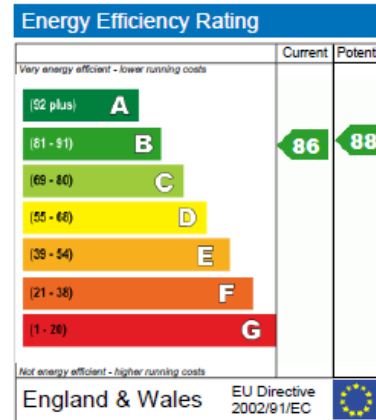
Flat 4

Dwelling type:

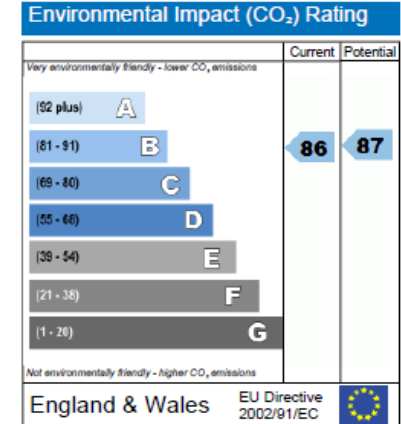
Mid floor flat

d

on fuel costs and environmental impact based on carbon dioxide (CO₂) emissions.



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating the more energy efficient the home is and the lower the fuel bills are likely to be.



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO₂) emissions. The higher the rating the less impact it has on the environment.

Estimated energy use, carbon dioxide (CO₂) emissions and fuel costs of this home

	Current	Potential
Energy use	108 kWh/m ² per year	102 kWh/m ² per year
Carbon dioxide emissions	1.1 tonnes per year	1.0 tonnes per year
Lighting	£43 per year	£27 per year
Heating	£148 per year	£149 per year
Hot water	£66 per year	£66 per year

Based on standardised assumptions about occupancy, heating patterns and geographical location, the above table provides an indication of how much it will cost to provide lighting, heating and hot water to this home. The fuel costs only take into account the cost of fuel and not any associated service, maintenance or safety inspection. This certificate has been provided for comparative purposes only and enables one home to be compared with another. Always check the date the certificate was issued, because fuel prices can increase over time and energy saving recommendations will evolve.

To see how this home can achieve its potential rating please see the recommended measures.



Remember to look for the energy saving recommended logo when buying energy-efficient products. It's a quick and easy way to identify the most energy-efficient products on the market.

For advice on how to take action and to find out about offers available to help make your home more energy efficient, call 0800 512 012 or visit www.energysavingtrust.org.uk/myhome

Simple regulation, better comfort, better
performance =
throw the radiators out!



Where would you like to live?



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specifically**

Clare Murray – Levitt Bernstein

Rory Bergin – HTA

Kirk Archibald - PRP