SEEDS Conference 2017

Thermal comfort, air quality and overheating abstract

GBE

Green Building Encyclopaedia

Possible title:

Build Light, Insulate Right, Solar Tight

Possible sub-title:

Overheating the real problem and the real solution

299 of 300 words

After 10 years of research and endless publications Zero Carbon Hub understood all but the most important issue related to overheating. BRE's contribution to the NHBC publication on overheating showed a serious misapplication and misinterpretation of Infrared thermography. Between them their recommendation to clients is to require their designers to address overheating in their designs. In the absence of the whole set of solutions the designers only have the tools to solve the easily understood and easily or not so easily solved problems. The main problem remains and 20% of housing suffers from overheating.

The missing puzzle piece is well understood by Greenies and green manufacturers, so whilst it is missed by mainstream, it remains a fringe benefit, house occupants suffer and the 20% will continue to grow.

GreenDeal, ECO, ECA and ETL were ill equipped with wrong materials, products and installers to solve this.

Bonfield is prompting the follow up to GreenDeal and ECO; its time to get up to speed or we will continue to exacerbate the problem and put more people in a vulnerable position as Climate Change takes hold.

Brian Murphy of National Green Specification and author of Green Building Encyclopaedia will cherry pick from the 80 page GBE Issue Paper: Overheating, to share the analysis of past project failures and successes; critique ZCH and NHBC findings; and offer a route to successfully addressing client's briefing requirements.

A clue: Thermal insulation needs to be considered for all of its performance characteristics and not just by k-value, thinness or price. Building Regulations addresses winter heating issues in setting U values, but it fails to address summer overheating and does not acknowledge decrement delay characteristics. Better U values result in overheating because solar heat can get in unhindered, but cannot get back out. Attend to learn more.

7th February 2017 – 20th February 2017