



Health & well-being for occupants: Ventilation, Condensation & Internal Air Quality

10th November 2010, 13.30 – 17.30

The Window, Islington, London N1 8QG

Event in partnership with



Background

Higher standards of air tightness associated with the drive towards low carbon homes, have led to a perceived increase in occupant's negative feedback around condensation and poor indoor air quality and could have some potentially serious unintended consequences for occupant health & well-being unless they are carefully managed. Issues include:

- A perceived resurgence in the incidence of condensation problems
- Increased drying out times for wet construction on air-tight dwellings: 4 or 5 fold increases in recent cases.
- Build up of moisture in roof spaces, potentially leading to ingress through ceilings.

Many developers are increasingly using MVHR, extract fans and trickle vents to address these issues, but there can also be problems around occupant use of these systems, which also need serious consideration.

- Increased complexity of systems, leading to poor understanding of controls by occupants
- Variable accuracy of sizing and commissioning for ventilation systems (especially in flats with low and high level ventilation or limited facades)
- Occupant interventions, such as blocking or removing vents or fans, due to perceptions of noise, draught, or cost.

However, as there has only been limited post occupancy evaluation and research into indoor air quality, it is difficult to confirm whether there is actually an increasing problem in reality. This event will examine leading developers' experience from both the public and private sector, and explore potential solutions they have adopted.

Who should attend?

Developers, housebuilders, RSLs and client groups who want to create a better and wider agenda for sustainable housing.

To book a place at this event, please email Laura:

info@goodhomes.org.uk

Free for GHA members, £100 plus VAT (£117.50) for non-members
£50 plus VAT (£58.75) for NHF members, HCA registered RSLs or ZCH invitees.

Programme

- 13.30 **Arrival and Light Refreshments**
- 14.00 **Chair's welcome and introduction**
Lynne Sullivan (sustainableBYdesign and Chair of the Ventilation and Indoor Air Quality Task Group on behalf of the Zero Carbon Hub)
- 14.15 **Condensation, ventilation and good Indoor Air Quality**
Professor Mike Davies (UCL)
This presentation will explore the implications of Relative Humidity (RH) for Indoor Air Quality, including the consequences of high RH levels and its different causes (poor thermal quality, poor ventilation or too much water vapour generation). The talk will conclude with a discussion about how current Building Regulations deal with this issue.
- 14.40 **Ventilation and Part F**
David Ross (AECOM)
This presentation will initially outline the key drivers for the changes in Part F of the Building Regulations. David will describe evidence on the effectiveness of the current regulations and harmonisation with tightening energy performance standards and then highlight resultant key changes that need to be considered by a development manager.
- 15.00 **Panel Session 1 – Practical experience of design & installation for good ventilation and air quality**
Tony Woodward, (Kingerlee Homes), Adrian Buffery, (Greenoak Housing Association), Richard Partington (Richard Partington Architects)
10 minutes from each speaker on their experience of design & construction issues relating to ventilation and air-tightness. Followed by an open discussion for the audience to share their latest experiences, problems and potential solutions.
- 15.45 **Refreshments**
- 16.05 **The Human Factor – Occupant Wellbeing**
Fionn Stevenson (Oxford Brookes University)
This talk will explore the understanding and use of natural and active ventilation systems. Issues covered include: handover processes with residents, guidance on systems and controls, resident and developer expectations, and possible interventions.
- 16.20 **Panel Session 2 - Practical experience of managing ventilation and air quality for occupant wellbeing**
Paul White (Town and Country Housing Group), Ian Mawditt (Four Walls Consulting), Angela Godrich (Notting Hill Housing Trust)
10 minutes from each speaker on their experience of management, operation and behaviour issues relating to ventilation. Followed by an open discussion for the audience to share their latest experiences, problems and potential solutions.
- 17.05 **Solutions to ventilation and condensation problems**
A discussion session to explore potential solutions to the above problems and to describe further workstreams planned by the event partners.
- 17.20 **Summary and next steps**
Lynne Sullivan
- 17.30 **Close**
Drinks and networking

Next events:

AGM and Winterval: Industry Transformation . 1st December, 2010