

WORKSHOP 4 PROPOSAL FOR 2012 NCEUB WINDSOR CONFERENCE

Title: How to make comfortable low energy buildings that really do work?

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Workshop description:

Many buildings are intended to be robust, comfortable, low energy, and low carbon. However in most cases the intended performance is not achieved in practice. In this workshop the question to be answered is ‘how do we address this and create buildings that really do work?’

Three papers will bring forward some relevant information to help stimulate ideas:

Paper 1: The first paper gives insight into reasons found for performance gaps in buildings that are promoted as best practice and examples to be replicated. Whether current initiatives such as EPBD, LEED, BREEAM, Soft Landings, Green Star, BCVTB, or BIM will address these gaps is briefly reviewed.

Paper 2: There is increasing reliance on building simulation in design of advanced buildings; the second paper investigates the variations in predicted performance resulting from different simulation users; and discusses weaknesses in the current use of simulation and the potential impact this can have.

Paper 3: To have a design that is informed by feedbacks from actual performance of similar buildings would appear to be a key to design success. The third paper reviews predicted energy performance, actual energy performance, and occupant satisfaction for 60+ buildings. The buildings are categorized considering occupant and climate adaptation opportunities and building servicing strategy; the performance of the different building categories is analyzed and relative performance highlighted.

Discussion:

The Windsor conference is a great opportunity to gather diverse inputs. The intention is to break into ‘buzz’ groups of 4-7 persons to briefly consider the following:

1. Best practice examples: Can we identify buildings and building types that really do work? What are the key things that make these buildings successful? Can we identify processes for creating buildings that really do work? What are the key things that make these processes successful?
2. What can be done to improve current industry or policy initiatives so that comfortable low energy buildings are created (e.g. EPBD, LEED, BREEAM, Soft Landings, Green Star, BCVTB, BIM etc...).

Then each buzz group gives an update to the others on the output from their group discussions and a broader discussion chaired.

(Pens, flip charts etc. will be provided! Prizes possible for best knowledge shared etc.).