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EUDP

Research Institutions:

DTU

University of Aalborg

Center for Energy Informatics, University
of Southern Denmark

Danish participation in IEA EBC Annex 66

Occupant behavior has great influence on building energy consumption. As a consequence, occupant behavior is a key issue for building design optimization, energy diagnosis, performance evaluation, and building energy simulation. But the awareness of influences of occupant behavior is insufficient both in building systems design and energy retrofit nowadays, leading to limited understanding and inappropriate over-simplification.

There are over 20 groups all over the world studying occupant behavior individually. As a result, the occupant behavior models made by different researchers are often inconsistent, with a lack of consensus in common language, in good experimental design and in modeling methodologies. Due to the complexity and the great district discrepancy of occupant behavior, it is prerequisite for researchers to work together to define and simulate occupant behavior in a consistent and common way. International cooperation is very important for both knowledge discovery and data sharing. The target of Annex 66 is to set up a standard occupant behavior definition platform, establish a quantitative simulation methodology to model occupant behavior in buildings, and understand the influence of occupant behavior on building energy use and the indoor environment.