

INDOOR ENVIRONMENT IN BUILDINGS WITH NATURAL VENTILATION

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Summary

The most important criteria for evaluation of building engineering is the state of indoor climate and energy consumption. Increase of the rate of energy saving resulted not only in the use of better barriers, but also building elements, such as windows, having low air leakage values. Simultaneously, in the design of new buildings and the retrofit of existing buildings, traditional structures of natural ventilation are used. In these cases, the ventilation is an important tool for a desirable realization of all environmental and energy requirements. The paper presents selected results of a long-term research work. These results were obtained by questionnaires, measurements and simulations of ventilation processes in typical detached houses, blocks of flats and office buildings. The main objective of the presented paper is to demonstrate investigations and summarize a large number of results which describe the airtightness and natural ventilation on indoor environment.