

STUDY OF THE RELATIONSHIP BETWEEN THE PERCEIVED AIR QUALITY AND THE SPECIFIC ENTHALPY OF AIR POLLUTED BY PEOPLE

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Summary

This paper deals with the acceptability (AKC) and perceived concentration of pollutants (D) emitted by occupants in relation to the specific enthalpy (h) and relative humidity (φ) of indoor air. Measurements of AKC/D/, described by semilogarithmic function depend significantly on both $\ln h$ and $\ln \varphi$. The equation fits to the data published in the literature in a reasonably good way. Therefore, it indicates that the linear function between AKC and h which is commonly used in literature yields rough approximations. The proposed equation allows for the validation of the indoor microclimate and brings an idea how to make measurements of the perceived air quality instrumentally and how to control the air conditioning process.