

Bartnicki, G., Nowak, B. Factors Affecting the Heat Demand in Dwelling Houses. *Ochrona Srodowiska* 2011, Vol. 33, No. 2, pp. 45–48.

Abstract: Based on the results obtained, the values of individual annual heat demand for heating purposes in a multi-unit apartment complex were calculated, taking into account the location of each apartment on particular floors. The value of this parameter averaged $0.222 \text{ GJ/m}^2\text{a}$ for the whole investigated complex. The location of the apartment in the block of the building was found to impact not only on the design heat load of the space being heated, but also on the actual heat demand. Analysis of measured results has revealed that actual heat demand was influenced by the location of the apartment in the block of the entire building. Statistical analysis of heat demand has disclosed that the apartments can be grouped into two basic classes: those on the extreme and those on the intermediate floors. Heat demand in an individual apartment may also be influenced by some random factors such as personal habits, individual expectations of comfort, or the culture of handling the heating installation.

Keywords: Heating, apartment building, heat demand.