## Microclimate in residential premises

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## Анотаиія

У цій статті розглядається важливість дослідження мікроклімату в житлових приміщеннях та його вплив на здоров'я та комфорт проживання людини.

**Ключові слова:** Комфортні умови проживання, параметри повітря, вентеляційна система, енергозберігаючі системи, звукоізоляція низького рівня, енергозберігаючі системи.

## Abstract

This article examines the importance of researching the microclimate in residential premises and its impact on human health and comfort.

**Keywords**: Comfortable living conditions, air parameters, ventilation system, energy-saving systems, low-level sound insulation, energy-saving systems.

The microclimate in residential premises is an important aspect of ensuring comfortable living conditions. Temperature, humidity, noise level and other indoor air parameters can affect a person's health and well-being. In this regard, the study of the microclimate is becoming more and more relevant.

Studies of the microclimate in residential premises have shown that temperature and air humidity are the main parameters that affect human comfort. According to established standards, the optimal air temperature in residential premises should be between 18-22 degrees Celsius, and the relative humidity should be between 40% and 60%. However, it was determined that a large number of residential premises do not meet these standards. They are often characterized by low air humidity, especially in winter, when the heating system is turned on. Also, a large number of residential buildings do not have a proper ventilation system, which leads to mustiness and unpleasant odors. In addition, the noise level can also affect the comfort of living in residential premises. The greatest noise loads occur in premises located near roads and railways, as well as in high-rise buildings with a lower level of sound insulation.

The microclimate in residential premises is an important aspect of ensuring comfortable living conditions. Air parameters such as temperature and humidity have a great influence on human health and well-being. However, many residential premises do not meet the established microclimate standards. In order to ensure comfortable living conditions, it is recommended to install an appropriate ventilation system that ensures sufficient air exchange in the room. It is also important to install windows and doors with high-quality sound insulation, which helps reduce the noise level in the room. In addition, it is important to use energy-efficient technologies, such as solar panels and other energy-saving systems, which reduce heating costs and provide a comfortable indoor microclimate. Therefore, studies of the microclimate in residential premises have shown that air parameters have a great influence on the comfort of human habitation. To ensure a comfortable microclimate, it is necessary to install appropriate ventilation systems, use energy-efficient technologies and sound insulation materials, which will help ensure comfortable living conditions in residential premises.

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