

INDOOR MICROCLIMATE COMFORT LEVEL CONTROL IN RESIDENTIAL BUILDINGS

Bauyrzhan Omarov, Karlygash Baisholanova, Rustam Abdrakhmanov, Zhanar Alibekova,
Maxat Dairabayev, Rollan Narykbay and Bakhytzhhan Omarov

Abstract

The paper investigates research microclimate control in residential buildings. As an indicator of indoor microclimate comfort, indoor air temperature and relative humidity level were considered, and additional influenced factors to temperature and humidity level were factor determined and applied to create comfort parameters. In order to ensure comfort microclimate, mathematical model of comfort temperature and humidity level are created and algorithmic process to ensure desired indoor air temperature and humidity level are considered. Results section illustrates the simulation of distributions of indoor temperature and relative humidity level in the residential building.

Keywords and phrases:

comfort microclimate, temperature control, humidity control.