

INTERNATIONAL EXPERIENCE AND IMPROVED APPROACHES IN BOOSTING THE ENERGY EFFICIENCY OF RESIDENTIAL CONSTRUCTIONS

Xalimov Xabibullo Baxtiyorjonugli*

*Assistant,
Fergana Polytechnic Institute,
Fergana, Uzbekistan
Email id: x.xalimov@gmail.com

DOI: 10.5958/2278-4853.2022.00224.5

ABSTRACT

Improving the energy efficiency of buildings Information about the experimental and approach methods is provided.

A contemporary single-family residence under construction nowadays increasing the energy efficiency of constructions is becoming a need of the hour, because most of the existing residential buildings in the Republic of Uzbekistan houses developed and erected on the basis of individual projects are enough. The climate of the Central Asia, including Tashkent, is hot when architectures such houses and is strictly continental. A building in use in such a climate when the temperature in the rooms is 40-45°C during the summer, the room temperature is more than 45°C exceeds. This situation creates an uncomfortable microclimate in the room brings Energy of residential buildings under the climatic conditions of Uzbekistan to analyze from the point of view of increasing efficiency, the modern one under construction energy-efficient barrier structures of residential building projects placement of roads, windows and residential buildings in the area to analyze Taking into account the dry-hot climate of Uzbekistan is very important is of great importance.

An energy-efficient house is a building that is comfortable inside the building. It takes very little energy to maintain the microclimate. Such energy saving in buildings reaches up to 90%. Annual energy in buildings of this type consumption can be less than 15kWh per 1m². As an example Most of the private houses being built today (reinforced concrete foundation, "warm floor" system without additional heating, walls 1.5 bricks thick together with cement plaster, typical plastic windows, roof thermal insulation 150mm and without an air handler in the ventilation system) for heating the amount of consumed energy is 110-130kWh per 1m² per year.

KEYWORDS: *Ventilation, Energy Consumption, Insulation, Warm Floor.*

REFERENCES

1. Walter R. Jaggard Francis E. Drury Architectural Building Construction: Volume 1: A Text Book for the Architectural and Building Student Cambridge Univ Press Angliya, Kembridj, 2013.

2. Francis D.K. Ching Building Construction Illustrated 5th Edition Wiley; 5 edition USA, 2014.
3. Miralimov M.M., Sayfiddinov S., Babajanov M.D. ARXITEKTURA. Darslik. Toshkent, 2016 y.-316 bet.
4. QMQ 2.01.04-97* “Qurilishdaissiqliktexnikasi”. Toshkent–2011y.