

Individuality of Production and Work Organization in Low-Room Residential Construction

Tutiyo Egamberdieva¹

¹ Researcher, Tashkent University of Architecture and Civil Engineering

Abstract:

In the article, the issues of production and organization of technological work in the construction of low-rise residential buildings, the issues of achieving high energy efficiency and reducing energy consumption are considered to be one of the main issues in the national economy development policy of our country.

Keywords: building, structure, facility, establishment, energy, production, efficiency.

Introduction: The field of low-rise house construction in Uzbekistan is currently in a period of strong development, the main goal of which is to develop rural areas and districts near the city. The main reason for the increase in the demand for the construction of low-rise residential buildings is primarily explained by the fact that significantly less money is spent compared to high-rise buildings. In addition, high-rise buildings do not require expensive engineering devices and equipment (elevator devices, high-power pumping equipment, fire protection systems, etc.), as a result, the cost of using housing is much lower. The state program to provide the population with affordable and comfortable housing, in particular, the reduction of the purchase price in all aspects, first of all, the reduction of the cost of construction, as well as the reduction of the consumption of fuel and energy resources (YoER) during the construction of buildings are envisaged.

In recent years, the use of energy-saving technologies that save and reduce energy resources has become a promising direction in the field of residential construction. However, the stage of construction of buildings is distinguished by the amount of funds and material costs, the costs of using construction machines and mechanisms, the organization of the construction area, etc. These

features are related to the consumption of fuel and energy resources (hereinafter - YoER), the use of construction machines and mechanisms, equipment, mechanical tools, the operation of construction sites, and the use in the construction of household cities, cottages, villages and quarters. In its place, it can occupy most of the cost of the general construction system, therefore, it is necessary to take into account the above characteristics during the construction period.

The advantages of low-rise residential buildings, the requirements of the adopted legal and regulatory provisions, energy efficiency in all successive stages of construction, should correspond to the energy consumption during the construction period. The issues of achieving lower energy consumption and improving resource supply by developing them using organizational-technological modeling methods in the construction of low-rise residential buildings are relevant not only in the construction of low-rise residential buildings, but also in the field of general construction.

The issue of achieving high energy efficiency and reducing energy consumption is currently one of the main issues in the national economy development policy of our country.

It is no secret to anyone that the complex and dangerous processes and unpredictable changes taking place in the international arena today are seriously testing the world economy.

In recent years, the construction sector of low-rise buildings has been a promising direction in housing construction in Uzbekistan, and we can see in a number of scientific sources that it will make up about 50% of the total housing construction in 2019. According to statistics, from 1991 to 2016, there were about 2,000 construction contracting organizations, and today their number has exceeded 40,000. The number of enterprises operating in our republic has doubled over the past 6 years. In order to create a favorable business environment, 26 billion dollars worth of investments were attracted to Tashkent alone, while 93,000 apartments were built and handed over to residents. Schools with 30,000 places, kindergartens with 20,000 places, medical institutions with 2,000 places, parks on an area of 200 hectares, more than 10 large sports complexes were built. In order to develop public transport, 19 metro stations were commissioned in the city.

Currently, within the framework of a number of projects in our Republic, comfortable conditions are being created for residents, based on the principle of "green and safe city", for the movement of metro and electric buses, free movement of pedestrians and bicycles. Underground parking lots will be built for cars. It is planned to build 14 tunnels and 7 bridges over the Chirchik and Karasuv rivers. In the first stage of the project, apartment buildings for 60 thousand residents of Tashkent, 30 schools, 20 kindergartens, Construction of multi-disciplinary hospital and 5 family polyclinics is expected.

Also, it is planned to build modern sports facilities to hold the 4th Summer Asian and 5th Para-Asian Youth Games to be held in Tashkent in 2025 at a high level. Within the framework of this project, an Olympic town with modern sports facilities will be built.

Currently, 100 hectares of land has been allocated for the town, and construction and assembly works are underway.

Under the leadership of our government, according to the development strategy of New Uzbekistan for 2022-2026, by actively introducing "Green economy" technologies in all sectors, measures will be taken to increase the energy efficiency of the economy by 20% and reduce the amount of harmful gases released into the air by 20% by 2026. In 2023: individuals and legal entities who have installed renewable energy sources devices with a total capacity of up to 100 kW will pay property tax on these devices, plots occupied by devices land tax and the payment of profit tax calculated from the profit received by legal entities for the electricity sold to the public network for a period of three years from the moment they were put into use, for a power of not less than 25 percent of the power of the installed solar panels if it is installed with an electric energy storage

system, it is exempted for a period of ten years; the introduction of the requirement to install solar panels on at least 50% of the free space of the roofs of high-rise buildings to be put into use, as well as the domestic and technical needs of all fuel (gasoline, liquefied and compressed gas) filling stations in the republic and electricity for lighting the territory at least 50 percent of the energy supply is covered by solar panels installed in these facilities.

Starting from 2024, traditional electricity used for lighting all types of sports fields being built in the regions will be completely abandoned, and a system of using modern alternative energy sources will be introduced instead.

In addition, by increasing the attractiveness of business projects on the use of alternative energy sources in administrative and household buildings and structures, including residential areas and apartments, and the construction of micro and small hydroelectric power stations, it is aimed to attract more private investments in the sector, and in this regard measures are being taken to support our people in every way by the state.

Conclusion: In conclusion, as a continuation of the execution of the tasks and tasks set by our Government above and in order to ensure energy efficiency of individual houses, the Ministry of Construction and Housing and Communal Economy of the Republic of Uzbekistan and the United Nations Development Program in cooperation The program "Cooperation in the development of the construction of energy-efficient rural houses in Uzbekistan" was implemented.

Accordingly, the main goal of the program is to provide the population in rural areas with comfortable and improved conditions that do not harm the environment.

This project is aimed at providing fast-developing residential buildings built in rural areas of our country with a stable development path and a transition to a process that reduces the emission of greenhouse gases.

References

1. Байбобоева, Ф. (2023). Korxonaning Iqtisodiy Xavfsizligini Ta'minlashning Yo 'Nalishlari Va Funktsional Elementlari. *Economics And Innovative Technologies*, 11(3), 262-268.
2. Sattikhodjaevich, B. Z., Sultonboyevich, A. A., & Tutiyo, E. (2023). CONDUCTING CONSTRUCTION WORKS IN URBAN AREAS ANALYZING THE CONSEQUENCES OF A STRONG EARTHQUAKE. *Scientific Impulse*, 1(10), 1483-1490.
3. Sultonboyevich, A. A. (2024). Temperature and Moisture-Deformations of High-Temperature-Resistant Concrete Under Single Impact Of Water And Temperature. *European Journal Of Contemporary Business Law & Technology: Cyber Law, Blockchain, And Legal Innovations*, 1(2), 5-8.
4. Sultonboevich, A. A., & Abdurauf o'g'li, A. I. (2023). WAYS TO REDUCE HYDRATION AND CRACKING OF CONCRETE IN THE PRODUCTION OF SPECIAL REINFORCED CONCRETE PRODUCTS. *British Journal of Global Ecology and Sustainable Development*, 16, 5-9.
5. Abdurahmonov, A., Madamiovna, K. D., & Egamberdiyeva, T. (2023). High Temperature Resistant Reinforced Concrete Made on the Basis of Industrial Waste. *Best Journal of Innovation in Science, Research and Development*, 2(3), 26-33.
6. Abdurahmonov, A., Madamiovna, K. D., & Egamberdiyeva, T. (2023). Technology of Manufacturing Technology of Pre-Tensioned Intermediate Plate by Continuous Molding Method. *Best Journal of Innovation in Science, Research and Development*, 2(3), 34-40.

7. Байбобоева, Ф. (2023). Korxonaning Iqtisodiy Xavfsizligini Ta'minlashning Yo'nalishlari Va Funktsional Elementlari. *Economics And Innovative Technologies*, 11(3), 262-268.
8. Байбобоева, Ф. (2023). Тадбиркорлик Субъектлари Иқтисодий Хавфсизлигини Таъминлашда Молиявий Хавфсизлик Масалалари. *Economics And Innovative Technologies*, 11(2), 107-112.
9. Nabijonovna, B. F. (2020). Support for small business and private entrepreneurship in Uzbekistan. *ECLSS Online 2020b*, 524.
10. Nabijonovna, B. F. SECURITY OF ECONOMIC ACTIVITY IN ENTERPRISES. *Process Management and Scientific Developments*, 8.
11. Erdős, F., Németh, R., & Bayboboeva, F. (2023). Virtual Teamwork in Gamified 3D Environment. *INFOCOMMUNICATIONS JOURNAL: A PUBLICATION OF THE SCIENTIFIC ASSOCIATION FOR INFOCOMMUNICATIONS (HTE)*, (SP), 15-20.
12. Buzrukov Zakiryo Sattikhodjaevich, Abdurahmonov Adkhamjon Sultonboyevich, & Egamberdiyeva Tutiyo. (2023). SHAHAR XUDONLARDA QURILISH ISHLARINI O'TKAZISH KUCHLI ZILZINA OQIBATLARINI TAHLIL QILISH. *Ilmiy impuls*, 1 (10), 1483-1490. <http://nauchniyimpuls.ru/index.php/ni/article/view/9689>.
13. Бузруков, З. С. & Кохоров, А. А. У. (2022). Использование солнечной энергии в системах теплоснабжения. *Строительство и образование*, (1), 113-121.
14. Бузруков, З. С. & Кохоров, А. А. У. (2022). Определение прочности кирпичной кладки на срез при сейсмическом воздействии. *Строительство и образование*, (2), 14-18.
15. Sattikxo'jaevich, B.Z., Mutalibovich, RS, Chorueva, V., & Abduhalilova, M. (2023). SHAHARLARNING EKOLOGIK MUAMMOLARINING SABABLARI VA YECHIM YOLLARI. *JURNAL OF ENGINEERING, MEXANICA VA ZAMONAVIY ARHITEKTURA*, (2), 175-178.
16. Бузруков, З. С. (2023). ОСОБЕННОСТИ СТРОИТЕЛЬСТВА И ЭКСПЛУАТАЦИИ СЕЙСМОСТОЙКИХ ЗДАНИЙ. *GOLDEN BRAIN*, 1(35), 195-200.
17. Бузруков, З. С., & Кохоров, А. А. У. (2022). Определение прочности кирпичной кладки на срез при сейсмическом воздействии. *Строительство и образование*, (2), 14-18.
18. Zokiryo, B., & Abdurahmonov, A. (2023). G'sht jangidan issiqlikka chidamli plitalarning ba'zi strukturaviy jihatlari. *E3S Web of Conferences* da (401-jild, 04065-bet). EDP fanlari.
19. Бузруков, З. С. (2023). ОСОБЕННОСТИ СТРОИТЕЛЬСТВА И ЭКСПЛУАТАЦИИ СЕЙСМОСТОЙКИХ ЗДАНИЙ. *GOLDEN BRAIN*, 1(35), 195-200.
20. Turg'unov Muxriddin Sotvoldi o'g (2024). Technologies for Professional Training Development of Future Builders-Engineers on the Basis of Innovation Approach. *European Journal of Contemporary Business Law & Technology: Cyber Law, Blockchain, and Legal Innovations* 2, 24-28
21. Abdumomon Kokhorov, Mukhriddin Turgunov (2023). THE ROLE OF MEDIA AND INFORMATIONAL EDUCATION IN THE TRAINING OF CIVIL ENGINEERS. *Golden brain* 35, 177-182
22. Turgunov Mukhriddin, Abdumomon Kokhorov (2023) MECHANISMS AND ADVANTAGE OF TEACHING STUDENTS TO CREATIVE THINKING THROUGH MEDIA EDUCATION METHODS IN THE INFORMATIONAL EDUCATIONAL ENVIRONMENT. *Golden brain* 35, 183-188

23. Turgunov Mukhriddin, Abdumonon Kokhorov (2023) FORMATION OF PROFESSIONAL COMPETENCES OF ENGINEER BUILDERS ON THE BASE OF INNOVATIVE TECHNOLOGIES. *Golden brain* 35, 171-176
24. Turgunov Mukhriddin, Abdumonon Kokhorov (2023) USE OF MEDIA EDUCATION IN DEVELOPING THE PROFESSIONAL TRAINING OF FUTURE CIVIL ENGINEERS IN THE INFORMATIONAL EDUCATIONAL ENVIRONMENT. *Golden brain* 35, 189-194
25. М. Тургунов Н.Р. Ходжиев (2021) ЭКОНОМИЧЕСКИЙ АНАЛИЗ ПО ГИДРОИЗОЛЯЦИИ ФУНДАМЕНТА ОБЩЕСТВЕННЫХ ЗДАНИЙ НАМАНГАНСКОЙ ОБЛАСТИ КАЧЕСТВО. ТЕХНОЛОГИИ. Инновации IV Международная научно-практическая конференция 2, 102-110
26. Turgunov Mukhriddin, Abdumonon Kokhorov (2023) MECHANISMS AND ADVANTAGE OF TEACHING STUDENTS TO CREATIVE THINKING THROUGH MEDIA EDUCATION METHODS IN THE INFORMATIONAL EDUCATIONAL ENVIRONMENT. *Golden brain* 35, 183-188
27. Madamiovna, K. D. (2023). AHSIKENT CASTLE AND THE CHARACTERISTIC FEATURES OF THE BATHS IN IT. *Новости образования: исследование в XXI веке*, 1(6), 939-949.
28. Abdurahmonov, A., Madamiovna, K. D., & Egamberdiyeva, T. (2023). Technology of Manufacturing Technology of Pre-Tensioned Intermediate Plate by Continuous Molding Method. *Best Journal of Innovation in Science, Research and Development*, 2(3), 34-40.
29. Madaminovna, K. D. (2022). CHARACTERISTICS OF FORMATION AND DEVELOPMENT OF THE ART OF BATHROOMING. *INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT, ENGINEERING AND SOCIAL SCIENCES ISSN: 2349-7793 Impact Factor: 6.876*, 16(3), 24-28.
30. Madamiovna, K. D. (2023). Architecture of Traditional Baths in Central Asia. *Best Journal of Innovation in Science, Research and Development*, 2(3), 41-47.
31. Abdumutalibovich, K. A., & Lutfillaevna, B. M. (2024). The Role of Bim Technologies in the Information System of Education. *European Journal of Contemporary Business Law & Technology: Cyber Law, Blockchain, and Legal Innovations*, 1(2), 9-13.
32. Бузруков, З. С., & Кохоров, А. А. У. (2022). Использование солнечной энергии в системах теплоснабжения. *Строительство и образование*, (1), 113-121.
33. Бузруков, З. С., & Кохоров, А. А. У. (2022). Определение прочности кирпичной кладки на срез при сейсмическом воздействии. *Строительство и образование*, (2), 14-18.
34. Abdumutalibovich, K. A., Abdushokirovna, M. Z., & Kh, A. (2023). IMPROVING VIRTUAL LESSON TEACHING METHODOLOGY BASED ON MODERN DIGITAL TECHNOLOGIES. *JOURNAL OF ENGINEERING, MECHANICS AND MODERN ARCHITECTURE*, (2), 187-190.
35. Akiner, M. E. (2016). Smart cities transformation in Turkey. *New arch-international journal of contemporary architecture*, 3(3), 8-16.
36. Рахимова, Г., Илхом, К., & Дедаханов, Б. (2023). ТАЪЛИМ ЖАРАЁНИДА ИННОВАЦИОН ТЕХНОЛОГИЯЛАРИНИНГ ЎРНИ. *Journal of new century innovations*, 21(3), 33-40.

37. Xatamovich, Q. D. (2023). Mamlakatimizda Arxitektura-Shaharsozlik Soha Mutaxassislari Tayyorlashni Takomillashtirish Choralari. *Journal Of Engineering, Mechanics And Modern Architecture*, (2), 179-181.
38. Egamberdiyeva, T. (2023). DESIGNING ENERGY EFFICIENT AND PASSIVE HOUSES. *GOLDEN BRAIN*, 1(35), 153-158.
39. Egamberdiyeva, T. (2023). ARCHITECTURAL AND CONSTRUCTION REQUIREMENTS IN THE DESIGN OF LOW-RISE RESIDENTIAL BUILDINGS. *GOLDEN BRAIN*, 1(35), 201-205.
40. Egamberdiyeva, T. (2023). ARCHITECTURAL AND CONSTRUCTION REQUIREMENTS IN THE DESIGN OF LOW-RISE RESIDENTIAL BUILDINGS. *GOLDEN BRAIN*, 1(35), 201-205.
41. Abdurahmonov, A. (2023). THE EXPERIENCE OF THE WORLD AND THE WORLD'S EXPERIENCES ON THE CONSTRUCTION OF MULTI-STOREY PARKING. *GOLDEN BRAIN*, 1(35), 165-170.
42. Sultonboevich, A. A., & Abdurauf o'g'li, A. I. (2023). WAYS TO REDUCE HYDRATION AND CRACKING OF CONCRETE IN THE PRODUCTION OF SPECIAL REINFORCED CONCRETE PRODUCTS. *British Journal of Global Ecology and Sustainable Development*, 16, 5-9.
43. Zikriyoxujaeva, M. (2023). NOANANAVIY ENERGIYA MANBAALARIDAN FOYDALANISH MASALALARI. *PROBLEMS OF ARCHITECTURE AND CONSTRUCTION (SCIENTIFIC TECHNICAL JOURNAL)*, 1(2), 269-271.
44. Zakiryo, B., & Abdurahmonov, A. (2023). Some structural aspects of heat resistant plates from brick fight. In *E3S Web of Conferences* (Vol. 401, p. 04065). EDP Sciences.
45. Sultonboyevich, A. A., & Muhammadalixon o'g'li, H. S. (2023). STUDY OF THE PROPERTIES OF HEATED CONCRETE BASED ON INDUSTRIAL WASTE. *Новости образования: исследование в XXI веке*, 1(6), 978-985.
46. Абдурахмонов, А. С., & Омонкелдиева, Ш. (2022). Пути снижения обезвоживания бетонной смеси и трещинообразования в железобетонных изделиях при их изготовлении. *Строительство и образование*, (2), 28-31.
47. Razzakov, S., & Abdurakhmonov, A. (2020). G 'ISHT PISHIRISH XUMDONLARI UCHUN ISSIQBARDOSH TEMIR BETON YOPMA PLITA. *SCIENCE AND INNOVATIVE DEVELOPMENT*, 3(3), 113-119.
48. Бузруков, З. С. (2023). ОСОБЕННОСТИ СТРОИТЕЛЬСТВА И ЭКСПЛУАТАЦИИ СЕЙСМОСТОЙКИХ ЗДАНИЙ. *GOLDEN BRAIN*, 1(35), 195-200.
49. Sattikxo'jaevich, B.Z., Mutalibovich, RS, Chorueva, V., & Abduhalilova, M. (2023). SHAHARLARNING EKOLOGIK MUAMMOLARINING SABABLARI VA YECHIM YOLLARI. *JURNAL OF ENGINEERING, MEXANICA VA ZAMONAVIY ARHITEKTURA*, (2), 175-178.