

Principles of Formation of Architectural and Design Solutions of Modern Residential Buildings in Samarkand

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Abstract: In this article, the development and proposal of the urban design of a new residential complex, which will be built on the site of a vacant area of the architectural center of Samarkand, formed in the twentieth century, as well as the architectural and compositional structure of the neighborhood. stated.

Keywords: complex, reconstruction, reconstruction, project, constructive, architecture, category.

The main part. The volume-design solution of the houses in the old houses does not meet modern standards, but in fact it is expedient to reconstruct such houses, as many of their constructive solutions are in demand. In addition, the interior design and appearance of such dwellings will need to be modified to meet current requirements.

The method of reconstruction should be based on a comprehensive approach that reflects the urban planning, architectural and social requirements. At the same time, each reconstructed dwelling requires individual solutions, which can be explained not only by the location of the dwelling in urban development, but also by its technical condition. The last factor is the determinant of the decision to be made. In addition to the above, the following factors also have a direct impact: the distance to the neighboring building, the degree of compliance with the requirements of orientation, climate and seismicity, noise regime, the location of the house on the highway¹.

Reconstruction methods depend on the age of the residential building, which in turn reflects the design-technological and architectural-planning features of the period, the condition of the load-bearing and low-rise structures, the quality of the work, as well as the quality of work².

There are three main categories to consider³:

Category 1 includes the idea of a pre-World War II (1-2-story) residence;

Category 2 includes the idea of permanent residence built in the 50s-60s of the twentieth century;

Category 3 may include the idea of a post-earthquake settlement (1966–1990).

The category of dwelling ideas differs by the number of floors, the number of floors, and the architectural-logical, design-technological solution, and this is typical for each category. At the same time, the recycling technology is also a factor in the development of reconstructive methods⁴.

¹Qudratovich, B. B. (2021). Personnel Issues in the Application of Nanotechnology in Construction and Architecture. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(5), 248-250.

² Dilshoda, S. About Modern Graphic Reconstruction Wall Painting Of The Throne-Room Of Afrasiab.

³ Предко Н.В. Обследование и реконструкция жилых зданий.–М., 2006.

⁴Холиков, С. Р. (2021). Историческое развитие архитектурного комплекса ХазратИ Имам (ХАСТИМОМ). *INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION*, 2(1), 104-107.

The decision to reopen has had a major impact on the way the game is played, which is being reconstructed in the fog. In the process of carrying out the reconstruction of the decided parts of the city, there will be a constant re-evaluation of the views on the reconstruction of this or that residential building.

Architectural design options include several cases⁵:

1) to maintain the size and composition of the residential building without changing it and to change the interior design solutions. In this case, it is possible to purposefully change the design solution to the required level or change the functional quality of the residential building (for example, the first floor of the residential building to commercial facilities);

2) One of the forms of reconstruction is the expansion and construction of residential buildings, which is typical for older and later residential buildings, which allow to increase the density of housing while maintaining the functions of housing and partially re-specialized. Modifications as a result of construction and erection of a residential building should be accompanied by the general composition of the building or the prospects for its reconstruction;

3) The degree of reconstruction is based on the assessment of the technical condition and reliability of the residential building, its elements are determined by the degree of change in the initial physical deterioration, taking into account the decision to reconstruct⁶. Emphasis is placed on overcoming obsolescence, increasing the operational characteristics of buildings and creating conditions for harmonious planning, from strengthening the foundations to increasing the floor area and rational use of underground space⁷.

Reconstruction is the main constructive-technological complex of the process, which is the most rational solution, along with advanced technologies that allow to carry out work in the context of small-scale construction.

The architectural features of residential buildings are based on the complete or partial redevelopment of the rooms and, as appropriate, the full and partial replacement of the interior design⁸. The basis of reconstruction projects are: the historical solution, the configuration of the building; the width of the building, the length of the stairs, the distance to the farthest part of the stairs and other factors.

When finding the architecture of residential buildings and architectural and planning reconstruction, it is necessary to take into account factors such as the location of the inner longitudinal wall and the pitch of the window sills, which affect the proportions of the houses⁹. The parameter of the height of the floor has a significant impact on the choice of cutting solutions. Further redevelopment of the complex may be possible through the re-specialization of the building from residential to non-residential. In addition to the construction of floors, the rational use of

⁵ Афанасев А.А., Матвеев Е.П. Реконструкция жилых зданий.–М., 2008.

⁶ Xurramovich, K. A. (2021). The problem of protection and use of architectural reserves of historical cities of Uzbekistan. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(4), 1220-1223.

⁷ Yerjanovich, Y. B., & Mamadiyoroglu, A. A. (2021). ABOUT THE URBAN PLANNING PRACTICE OF THE URDA FORTRESS OF ANCIENT JIZZAK. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(5), 148-151

⁸ Холиқов, С. Р. (2021). Марказий Осиё архитектура ёдгорликлари гумбазларининг турлари. *INTERNATIONAL JOURNAL OF DISCOURSE ON INNOVATION, INTEGRATION AND EDUCATION*, 2(2), 40-43.

⁹ Esirgapovich, J. A. (2021). CITY PARKS AND SOME ISSUES OF LANDSCAPE AND ENVIRONMENTAL ASPECT. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(5), 145-147.

basement space will be carried out, as well as through the relocation of nearby squares, shops, parking lots and other social facilities¹⁰.

In the reconstruction of the old housing stock, a special place is given to the formation of the architecture of the facades. All facades of buildings of architectural and historical value should be solved while preserving the existing compositions of their elements¹¹. The preservation of the unity of the architectural method can be ensured by the construction of residential buildings and the use of facade details in accordance with the composition of the house under reconstruction¹².

In conclusion, we must say the following.

1. The architecture of the houses to be built in Samarkand in the future depends on the scale of the architectural environment they are building, the natural and climatic conditions, the demographics of the population of Samarkand, the mentality and customs of the local people, the needs and opportunities of the people of independence¹³.

2. Regardless of the method of construction, the design of modern houses and neighborhoods to be built in the historical center of Samarkand is in the form of a composite structure, the requirements of modern urban planning and historical urban planning, the environment and the environment¹⁴. rather, it should be built on the basis of the new way of life and local principles of the people of Uzbekistan, fully equipped with the infrastructure of modern engineering networks¹⁵.

3. Conceptual projects of residential houses to be built under this project have also been developed: they are medium-sized, multi-section, with a slow-moving composition from the first floor to the upper part of the house. Due to the reduction in the number of rooms on the second and upper floors, they will have small roofs¹⁶. The courtyards have an area of 1 to 3 hundred square meters. It is recommended to make the yard landscape and hanging gardens in the style of modern hydroponics, ie "smart garden"¹⁷.

4. Although the proposed houses are built in the style of modern multi-section houses, they are designed in a manner similar to the traditional architecture and historical urban environment of the neighborhood houses in the historical cities of Central Asia¹⁸. Each family has its own small courtyard and a national-looking porch.

¹⁰ Yerjanovich, Y. B., & Mamadiyorglu, A. A. (2021). Principles of Using Ornamental Plants in the Interior. *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION*, 1(2), 79-81

¹¹ Ravshanovich, X. S. (2021). Types of domes of architectural monuments of Uzbekistan. *International Journal of Culture and Modernity*, 1, 5-8.

¹² Inomovich, A. N. (2021). Principles of Reconstruction and Formation of Residential Buildings Typical of Historical City Centers. *EUROPEAN JOURNAL OF INNOVATION IN NONFORMAL EDUCATION*, 1(2), 29-40.

¹³ Есбергенов, Б. Е. (2021). Памятник Калиятепы В Городе Джизак Об Изучении Методов Архитектурного Строительства. *CENTRAL ASIAN JOURNAL OF SOCIAL SCIENCES AND HISTORY*, 2(9), 69-72

¹⁴ Inomovich, A. N. (2021). CHARACTERISTICS OF HISTORICAL SAMARKAND CITY CENTERS. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(5), 155-158.

¹⁵ Нарзиёв, А. К. У. (2020). РАЗВИТИЕ ГРАДОСТРОИТЕЛЬСТВА УЗБЕКИСТАНА. *Academy*, (11 (62)).

¹⁶ Yerjanovich, Y. B., & Mamadiyorglu, A. A. (2021). ABOUT THE URBAN PLANNING PRACTICE OF THE URDA FORTRESS OF ANCIENT JIZZAK. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(5), 148-151

¹⁷ Alisherbek, N. (2021). Development of Urban Development in the Territory of Uzbekistan. *CENTRAL ASIAN JOURNAL OF THEORETICAL & APPLIED SCIENCES*, 2(10), 24-26

¹⁸ Ravshanovich, K. S., Xurramovich, K. A., & Inomovich, A. N. (2021). THE PROBLEM OF PROTECTION AND USE OF ARCHITECTURAL RESERVES OF HISTORICAL CITIES OF UZBEKISTAN. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(5), 152-154.

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