

DEVELOPMENT OF EFFECTIVE METHODS AS A RESULT OF THE USE OF INSTRUMENTAL TECHNICAL TECHNIQUES AND TECHNOLOGICAL SOLUTIONS TO IDENTIFY THE DEPRECIATION OF RESIDENTIAL BUILDINGS

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ANNOTATION

In this article, the instrumental technical techniques and technological solutions of the identification of the depreciation of residential buildings as a result of the use of effective methods of development of exit tables and present decrees and innovations in this direction are shown and developed.

Keywords: plot technology, plot work, modern plot lines, design, construction, exploitation, capital repair

INTRODUCTION

President of The Republic of Uzbekistan. The adoption of the decree of M.Mirziyoyev "on the strategy of actions for the further development of the Republic of Uzbekistan" adopted in 2017 brought the reforms to an absolute new level. According to this decree, the development program of our country in 2017-2021 was drawn up, which determined five priority directions of development of the country. All five priority areas are aimed at increasing the standard of living of the population, ensuring them a comfortable life. In particular, the provision of Housing to the population in this program will lead to further development of the sphere of modernization of the leading production sectors of the economy and, in turn, imposes huge tasks on the sphere.

Statistics show that in recent years there has been an increase in the number of accidents associated with buildings and structures. The rapid absorption of buildings is caused by a violation of technological processes and the mass nature of inappropriate conditions of operation. Therefore, for the calendar planning of repair and construction work is the initial basis, the question of determining the current technical condition of the object comes to the fore.

For many years, no significant changes have been made to the technique of technical study of buildings, but in recent times, this problem is being understood in state structures and finding an adequate price. Both at the legislative level and at the executive level, the processes aimed at increasing the security of buildings and structures are underway.

The life cycle of an optional building includes several stages - design, construction, exploitation, capital repair, in some cases, reconstruction, demolition and loss stages. The stage of exploitation is the most continuous in terms of time and, undoubtedly, in exactly the same period, the issue of security the most relevant. Depends on the quality of the technical operation of the building – the timely and adequate implementation of repair measures, the qualified supervision of the state of construction and technical systems and, finally, the safety and viability of the building, the amount of costs for its maintenance and the quality of living or other use, etc.

During the Soviet period of our country's development, state structures were engaged in issues of exploitation and evaluation of real estate. The concept of a free market does not exist, and the value of objects is determined by applicable norms or construction estimates.

The exploitation of objects was carried out by the flow method: the residential utility cell TKX has in its design a unit of "n" of buildings, according to the normative periodicity, (approximately) several objects built in a year were simultaneously repaired.

The organization of such a service to the buildings-made it possible to make a significant economy of public funds and ensure the maintenance of the state's residential and non-residential fund in a good satisfactory condition.

At present, the two directions that have been identified are independent types of business. On the one hand, if the work has an economic purpose, then the desire to make an economy and earn money leads to the development of the industry: qualified specialists are engaged in the work, self-government arises among companies operating in one direction, there is an exchange of experience between specialists from different companies, regions and even countries. But, at the same time, there are enough serious problems in the field.

At each stage of the composition and sequence of actions for the study of structures, regardless of what material they are made of, "according to GOST R 53778-2010" includes the following: preparatory work, preliminary (visual) study and detailed (instrumental) study.

Physical wear and tear of the object can be determined from the stage of visual study. But at the present time, the physical wear of buildings on the data of visual observation requires relevance, as a result of the emergence of new building materials and technologies of constructive solution of building elements VSN 53-86(r), the norms of departmental construction, which are the main documents determining the calculation methodology, while the totality of the rules and state standards do not.

In recent times, Information Technologies and programs that are aimed at the implementation of processes in the form of visualization, complex technical calculations and 3D models are used more and more, therefore, technical evaluation should also take advantage of modern processes.

Using the methodology for determining the physical wear and tear of the constructive elements of the premises and the processing of the received data, the exploitation company can formulate preliminary data for the approximate calendar planning of repair and construction work. After conducting the second stage of technical study, involving expert-builders, changes can be made to the received calendar plan; such an approach will have a positive impact not only on the financial situation of the company, but also on its own, from the point of view of the operational quality of the building.

The physical "life" of any building or facility includes three stages: adaptation, exploitation and wear. From the point of view of exploitation, each of these stages characterizes the need and opportunities for the repair of buildings or structures or their components (constructive elements), the scope of these repairs consists of the zones of maintenance, technical exploitation and the zone of boundary conditions.

The period of technical exploitation and service has the longest duration in terms of its duration, and it can be up to 80-90% of the total period of service of the object.

It is accepted to determine the technical condition of the building, as a rule, by its degree of wear (physical, functional, external erosion). It is necessary to take into account that the level of the technical condition of the affects many factors, such factors include: technological and natural loads, as well as effects, molecular changes of building materials and destructive effects of living organisms, as well as conditions of exploitation, functional function of the structure, regulatory requirements. Introduced amendments to the construction thermal equipment", according to which the total thermal resistance of blocking structures for reconstructed and newly constructed buildings should not be less than 3.2 M2s/W for example, for Tashkent, these amendments led to the emergence of many buildings that require additional capital funds.

We consider physical wear (absorption) in a much more detailed form, such wear is the response to a decrease or loss in the price of the building due to the deterioration of the physico-technical characteristics of the object under consideration.

Due to the gradual absorption by the structures in the conditions under which the exploitation, which is called normative conditions, increases in Wear, which in turn makes it possible to predict the condition of the object and the likelihood of its rejection at a given moment of time.

Thus, one of the main objectives of the technical evaluation is not only to determine the actual state of the object under examination, but also to predict the probability of denial of the object.

One of the tasks of the technical evaluation is to identify the causes of the appearance of these defects and their reproduction, as well as to investigate the processes taking place within the structures, the purpose of which is to determine the recommendations for the operation aimed at eliminating the causes of damage to the structures, as well as to establish.

Depending on the purposes of the technical examination of the building and the period of its exploitation, the system for the examination of the technical condition of residential buildings includes the following types of controls.

control of the instrumental reception of the technical condition of renovated (reconstructed) large buildings;

instrumental control of the technical condition of buildings in the process of scheduled and extraordinary examinations, as well as during the complete technical examination of the Residential Fund;

technical examination for capital repair and reconstruction of residential buildings;

technical examination of residential buildings (assessment of their technical condition) in case of damage to structures and accidents in the process of exploitation.

2011 year the concept of "technical condition monitoring" was officially adopted.

In addition to the above options, it is desirable to conduct technical examinations on objects similar to them in the following situations:

in providing information on the technical condition of the object under reconstruction for the development of the reconstruction project;

in providing information on the technical condition of the rooms, which are deemed worthy of re-planning;

before the capital repair of the object;

to determine the possibility of further exploitation of damaged buildings as a result of the influence of external factors;

to make a decision on the expediency of updating the construction of this object on the results of an assessment of the current technical condition of an unfinished object;

checking the technical condition of the object during an extraordinary or planned examination;

to assess the correctness of the purchase price of this object in terms of the technical condition of the real estate object;

carrying out measurement works for the legalization of an arbitrarily constructed building and determination and installation of the current state of the same building;

evaluation of the technical condition of the purchased real estate.

We believe that the methods of technical diagnostics it is worthwhile to classify the methods of instrumental technical evaluation of the condition of buildings (and priors, which are used accordingly) according to the nature of the studies carried out.

Therefore, to assess the condition of the building, information on cracks, deformations, cases of structures, thermal protective qualities, etc., can be of benefit.

When assessing the condition of buildings from a technical point of view, naturally, different works are performed, and for them different methods and different priors are used, such methods and priors can be attributed to:

- observation of cracks;
- deformation of buildings and structures in them;
- evaluation of the technical condition of the structures;
- control of heat protection qualities of blocking structures;
- determination of microclimate parameters;

- checking the level of illumination of the rooms;
- Analysis (Analysis) of the chemical composition of air in rooms;
- determination of sound insulation of rooms;
- evaluation of the condition of the grout.

On the other hand, the tests carried out can be divided into tests conducted in field conditions and laboratories. The methods used in the tests carried out in laboratories differ from each other according to the types of building materials:

- testing of mineral bonding agents;
- testing of fillers, concrete and mixtures;
- testing of masonry granular stone materials;
- wood testing;
- testing of metals;
- testing of bituminous materials, plastic and varnish materials.

Instrumental measurements and analysis of the results of laboratory tests will undoubtedly answer the following important questions:

- is it possible to increase the load on the load-bearing structures;
- what are the actual technical parameters of the elements of the object;
- is there a risk of an accident (there is a loss outbreak of operational qualities)? and so forth.

Thus, the instrumental examination will draw a complete card of all the defects and damages, draw up a possible scenario of their development and give recommendations to the exploiting company on the implementation of measures to reduce physical wear and tear.

This type of technical examination is often required in order for management to make decisions and solutions.

The main drawback of the Instrumental (complete) examination is an expression of the cost of doing the work.

RESULTS AND DISCUSSIONS

Currently, there are programmable controls that allow you to create informative visualization of the entire building with a parametric modeling tool, to give them an example of a 3D model, the model can be reflected at a given level of detailing all the constructive elements of the entire building. Arch; CAD and Autodesk Revit Architecture programs are known as the most popular programs of parametric modeling, each of which allows you to create an architectural model of buildings.

The main functions of this system are maintenance of engineering systems; management of resources and material and technical provision; management of area (surfaces), room, infrastructure, real estate arena; implementation of construction, technical Fire – technical control; inventory of funds, infrastructure.

From the CIS countries, the ValMaster FM control system has become popular in Russia, which allows to manage the operation of the facility, consisting of databases of integrated modules for the creation of complex data on the object, the construction on the floors, the creation of reports and management tools.

Various aspects of the object to take into account (considering) the specifications at ValMaster FM

- provides characteristics of address bookkeeping (address bookkeeping), registration-legal, characteristics of building volumetric-component solutions, characteristics of constructive solutions of buildings and structures, elements of landscaping, historical solutions, economic characteristics, including restoration price, physical wear, actual and balancing price. The operational management function is designed to analyze the effectiveness of its activities on the Planning, Organization, operation of the object. These are phrases from the following precedents:

- planning works and documents on the exploitation of the object and its elements on the basis of their accounting prices;
- to determine the funds spent on exploitation and formulate a budgetary plan for the exploitation of the object at the cost of planned work and services;

CONCLUSION

In the summary section of this article, it is worth to say and confirm that the research in the article is a high level of improvement in the quality of today's plot technology and the promotion of them widely Interstate this is one of the modern requirements.

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