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Research Article

ORGANIZATION OF CONSTRUCTION PROCESSES OF BUILDINGS

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ABSTRACT

The basis of all documents in the organization of construction processes is their regulatory framework. If project documentation based on concrete evidence is not prepared, the construction organization project will also have no basis.

KEYWORDS

The most important element in the organization of construction is its standards, normative basis.

INTRODUCTION

In the construction management system in Uzbekistan, great attention is paid to the task (function) of construction organization. The most important element in the organization of construction is its standards, normative basis. It is important that their requirements constantly correspond to the development of economy, science and technology.

Depending on the specific conditions, the availability of resources and the construction deadlines, three organizational methods of conducting work are used: sequential, parallel and in-line.

The sequential method provides for the implementation of all stages of the complex construction process at each of the objects (sites and plots) in a technological order, one after another.

METHODS OF RESEARCH

The total duration of construction compared to other methods is maximum, and the amount of resources consumed per unit of time is reduced.

The parallel method involves the simultaneous execution of a complex technological process at all objects (sections, occupants).

The total duration of construction compared to other methods is minimal, and the amount of resources consumed per unit of time is maximum.

The in-line method provides for the implementation of homogeneous construction processes that are part of a complex process (technological cycle), in flows - specialized units (brigades, links), sequentially without interruption in time, moving from one object (section, grip) to another.

With this method, the volume of consumed resources is rationally distributed over time; it is less than with parallel, and more than with sequential methods. The in-line method provides relatively short construction times and is the most optimal way to organize construction processes, as it provides for the rational use of resources, increasing labor productivity, timely preparation of backlogs for sequentially performed work, processes, operations and the rhythmic organization of construction.

By structure, flows are divided into private, specialized, object and complex.

A private flow is a uniform sequential execution by a link of a certain simple construction process in different areas (captures).

A specialized stream combines a group of private streams related by a common technology. As a rule, complex teams participate in a specialized flow, the products of which are a completed stage (or a set of construction processes) of building a building or structure.

The object stream covers a group of specialized streams, the total product of which is a finished building or structure.

A complex stream consists of several object streams that are interconnected and united by a common production. The result of the complex flow is a group of buildings and structures for various purposes. A complex stream can cover the work of an entire

construction organization that builds residential areas, industrial enterprises or agricultural complexes.

The flow method provides for the implementation of complex construction processes (technological cycles) in a certain rhythm and with a certain step.

Flow cycle (K_{fc}) - a set of construction processes that take place over a certain time, the result of which is a finished product or semi-finished product.

The rhythm of the flow (K) - the duration of the technological cycle in one section (capture).

Flow step (K_o) - the time interval between the start of work performed by a team (link) on a given grip and the start of work on the same grip by a team (link) performing the following technological processes.

The division of construction processes, the determination of the quantitative and qualification composition of performers, the rhythm, step and type of individual flows in each case is carried out taking into account the type, purpose and design solutions of objects, the conditions for implementation and the established construction time.

The construction standards system manages all aspects of project implementation: from conceptualization to design, construction, and regularly monitors and regulates relationships between entities involved in project implementation.

An important aspect of the relevance of the construction schedule development method is related to norms. The essence of the norms is clear and indisputable. Strictly based on project standards according to architecture and planning and structural solutions. Adopted design decisions and solutions are examined in order to determine compliance of design decisions with production standards as a further control - the primary and necessary stage of quality assurance. Expertise of the projects will be under the control of the state. [2]. It is planned to review all building codes in 2019- 2025.

According to [1], Uzbekistan may apply the following foreign regulatory documents in the field of technical regulation in the field of urban planning until December 31, 2028.

RESULTS

All the above standards are valid at the same time as national regulatory documents, including at the stage of examination of project documents [3]. At the same time, there is no special norm (norm) for drawing up a calendar plan in the system of organizational and technological preparation of construction. Current, national and foreign (Russian) standards provide the essence (quality indicators) and form of the calendar plan, but there is no logical structured and formalized method for its preparation, it is necessary to re-develop them.

CONCLUSION

Project institutions pay very little attention to the options for creating a construction schedule. The calendar plan of each project should be archived as an evidence base of the decisions made in the project. Currently, the archive does not have calculation documents confirming the correct distribution of capital investments and the volume of construction and installation works, as well as their compliance with standards.

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