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Discussion on Construction Quality and Safety Management of Industrial and Civil Buildings

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Abstract: With the improvement of people's living standards, the improvement of the industry environment, and the development of the economy, the quality of construction projects put forward higher requirements, especially civil construction projects, in recent years its scale is constantly expanded, the development of the construction industry gradually increased impact, From how to establish the construction quality management system, strengthen the building construction safety management and other aspects put forward some measures to discuss with you.

Keywords: Building construction; Quality; Safety

1. Having to establish a quality management system, and strengthen technical management to do the following points

1.1 construction in strict accordance with the construction procedure

The construction project has a wide range of scopes, long construction period characteristics, and is a more complex project, any process problems will affect the quality of the entire project, which requires construction enterprises must have a comprehensive perspective to consider the problem, Avoid the problem of rework, reduce economic losses. This requires that construction enterprises must carry out construction following the workflow and carry out construction in strict accordance with the process.

First of all, control the various factors that affect the project from the construction situation, the quality of the construction project is affected by many factors, including the comprehensive quality of the operator, the quality of the material, the technical level of the construction, the quality of the equipment and so on. Therefore, to ensure the quality of construction projects, we must strengthen the management of these factors. Strengthen the comprehensive quality of construction personnel, improve their technical level and professional literacy, to meet the requirements of the quality of construction projects under the new situation; Strengthen the management of construction materials, meet the needs of engineering construction in the application of materials, establish a material as the center of the quality assurance system, strengthen the control of materials, strengthen the purchase process of materials, to ensure the purchase of good quality and reasonable price of engineering materials; In addition, improve the technical level of construction, strengthen the management of construction technology, for different construction requirements to have different construction technology, which is a very key link to the quality of the impact, is the key factor to determine the quality; In addition, also cannot ignore the control of equipment, in the construction process, construction equipment is the main factor affecting the construction period, which requires construction enterprises to enhance the reasonable use of construction equipment, play its maximum effect, promote the improvement of construction quality, promote the development of construction enterprises.

1.2 Implementation of technical quality management measures

During the construction, the leaders, managers, and engineering and technical personnel of the enterprise should improve the awareness of the importance of quality and safety management, and formulate management plans and programs according to the actual situation in the early stage of the project, taking it as the focus of project management. In the planning and program development is a need to combine the actual climate characteristics of the project area to carry out, and take effective measures to ensure the safety of construction and technical personnel.

In the construction of the project, the enterprise should reasonably arrange the project construction schedule, and cannot blindly catch up with the progress. In the construction, the enterprise must be based on the actual weather to adjust the construction time of the project, in the summer need to avoid construction in the high-temperature period, while reducing the intensity of the work; For the personnel who carry out high-temperature operation indoors in summer, ventilation and ginger measures should be done, and the necessary cooling drugs and drinking

water should be equipped at the construction site. In addition, technical personnel need to strengthen the detection of foundation pit construction to ensure the quality of the foundation pit. At the same time, the construction of scaffolding should be done well, and the performance of the construction equipment should be tested to ensure the construction quality of the project. And in construction to strengthen the management of technology and construction process, only after ensuring that one of the construction processes meets the quality standards can be carried out the construction of the next process, to ensure the construction quality of the project.

1.3 Product quality is guaranteed by the highly technical quality of construction personnel

cadres, technical personnel should have a strong ability to carry out quality planning and target management, the ability to organize construction and technical guidance, as well as the ability to identify quality and check the quality, production personnel should have superb technical skills, meticulous work style, Strictly implement the legal concept of quality standards and operating procedures, service personnel should do a good job in technical and life services, can be excellent service, indirectly to ensure the quality of the project.

1.4 Strengthen the quality control of concrete in construction

As the most widely used raw materials in China's construction engineering, its quality will inevitably affect the quality of the entire project, therefore, construction enterprises must take effective measures to strengthen the control of concrete quality.

1.4.1 Control the quality of concrete raw materials

At present, the concrete used in construction projects is mainly through cement, aggregate, and additives through a certain proportion of harmony, therefore, the quality of concrete is affected by these factors. This requires construction enterprises in the concrete preparation process to be strictly by the proportion of the test, in the case of conditions allowed to select high-quality materials, by the national standards for concrete quality; At the same time, in the selection process of materials do not easily decide, to the origin, reputation, specifications and other factors for comprehensive analysis, batch sampling, reasonable testing, strictly prohibited the use of unqualified materials, in the selection of additives must strictly implement national standards, while taking into account the specific construction environment, Combine the raw material performance of concrete, match ratio and adaptability to cement and other factors to determine its variety; Comprehensive consideration, to lay a solid foundation for the construction of the project, to provide quality of concrete.

1.4.2 Improve the quality control level of concrete

In the process of controlling the quality of concrete must strictly follow the requirements of construction, take a reasonable pouring process, and formulate a scientific and effective pouring sequence; In the process of pouring vibration, combined with the requirements of building construction, control the time of pouring and vibration, exclude the moisture and bubbles on the concrete surface and inside the concrete, in the process of concrete acceptance, to avoid the slurry leakage caused by the formwork joint is not tight, and affect the quality of concrete.

2. With construction safety management, is the guarantee of the comprehensive benefit of construction quality

2.1 Grasp the project safety and quality must pay attention to occupational health

The establishment of the engineering quality and safety management system of enterprises needs to be carried out according to relevant standards to ensure the rationality and comprehensiveness of the management system. The most important thing is that the enterprise should establish the environmental occupational health and safety and quality system by the relevant standards so that it has strong operability and rationality. Its management system should cover the construction team of the project, the construction enterprise, and the project of these three faces. The enterprise is the first part of the safety and quality management, the chief engineer and technical person in charge to improve their own safety and quality awareness, establish a reasonable responsibility system, and strengthen the project management supervision and audit of the expert team, to use this expert team to inspect and evaluate the construction safety and quality of the project. In the construction, the construction team should also pay attention to the detailed management of the construction, protect the cost of the project and semi-finished products, it must do a reasonable arrangement of the construction process, reasonable arrangement of the construction time and space, and reasonable allocation of construction resources, to ensure the safety and quality of the construction.

2.2 Target management, safety prevention, and quality pre-control must be implemented

The pre-control of safety and quality problems only takes prevention as the guiding ideology and stifles the quality and safety of the project in the cradle. The following points need to be done in the pre-control:

2.2.1 The safety pre-control objectives and contents of the project are determined according to each construction project.

2.2.2 Analyze and study the hazard sources existing in the construction, and take reasonable measures on this basis.

2.2.3 Do a good job of daily safety inspection. In the safety management of the project, the daily safety inspection is very important,

which is the guarantee of the safety management of the project, and realizes the institutionalization and standardization of the management work.

2.2.4 Formulate scientific and reasonable construction operation procedures. During the construction of the project, the enterprise shall formulate a set of strict operating procedures to timely control and manage the unsafe behaviors and conditions existing on the construction site.

In the process of construction project safety management, it is mainly based on prevention. Enterprises and construction teams need to carefully inspect the implementation of the safety production responsibility system at all levels, and strengthen the inspection of hidden construction projects to ensure the safety and quality of project construction. If safety hazards are found in the management, they should be analyzed and controlled immediately.

3. Conclusion

In summary, in the construction of the construction project, the project manager and related leaders need to determine the safety and quality management objectives according to the characteristics and nature of the project, and according to the actual need to establish special management personnel and institutions, to ensure the construction safety of the project and its overall quality. At the same time, it is also necessary to establish a sound quality and safety management system, clear management responsibilities, and strengthen safety control, to enhance the economic and social benefits of the project.

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