
Analysis on Construction Quality Control Measures of Building Construction Engineering

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Abstract

The quality control of building construction projects is an issue that needs to be highly valued in the current situation of frequent housing problems, and is a top priority for safeguarding people's lives. The article expounds the role of improving the construction quality of building construction projects from three aspects. Then, from the perspectives of "people", "materials" and "equipment", the impacts on the construction quality of housing construction are analyzed and the proposed control measures are proposed.

Keywords

Construction engineering; Construction Quality; Measure

1. Introduction

With the development of the economy and the construction industry, residents are increasingly demanding the quality of their homes. Quality is like the lifeblood of a company. Once quality problems occur, not only the development of the company itself is hindered, but also the life and property safety of the residents and the economic development of the country are seriously threatened. Construction accidents often occur in China, and various kinds of work-saving materials have turned into bean curd residue engineering and unfinished building projects. Therefore, it is of great significance to analyze the factors affecting the quality of building construction projects and propose corresponding control measures.

2. Improve the Construction Quality of Building Construction Projects

2.1 Safeguarding People's Lives and Property

The quality of construction works directly affects the safety performance, service life, safety of people's lives and property, and daily life. Quality is a hundred-year plan. Once an accident such as a collapse of a building occurs, it will cause serious threats to people's lives and property and social unrest. Therefore, it is necessary to keep in mind that quality is the top priority of the building construction process.

2.2 Promote Healthy Competition in the Construction Industry

With quality and brand, high quality is the last word. If real estate, construction units, design units, and supervision units want to have a place in the fierce competition, they must take quality as the core. While meeting quality requirements first, accelerate progress, reduce costs, and enrich the diversity of building functions to meet user safety requirements and growing spiritual needs. The improvement of construction quality has made the company's position, image and competitive advantage in the construction industry improve, effectively reducing the phenomenon of cutting corners, illegal subcontracting and illegal subcontracting.

2.3 Promoting Economic Developmen

Improving the construction quality of building construction projects can effectively ensure the overall quality of the project and the progress of the project. The improvement of construction quality

effectively curbs accidents, reduces post-maintenance costs, reduces the risks of project participants, and maximizes economic development.

3. Factors Affecting the Construction Quality of Building Construction and its Control Measures

The construction quality of the project is formed in each construction link and is closely related to the various projects involved in the project. The person who is the subject of labor, the material that is the object of labor, and the equipment that is the means of labor are important expenditure items in construction engineering, and are also important factors affecting the quality of construction.

3.1 “Human” Factors and Their Control Measures

Since the construction process of the building construction project lasts for a long time, the participants in each time node are the factors that can affect the quality of the construction. Therefore, it can be discussed from three aspects: the construction unit, the construction unit and the supervision unit.

Generally, a construction project involves multiple construction units. The construction unit should pay attention to the overall professionalism of the construction unit and the industry reputation, work ability and qualification of the individual construction unit when bidding; China's construction management personnel generally have a low quality awareness. The quality awareness of construction unit management personnel such as project managers and technical chiefs will directly or indirectly affect the construction quality. Managers cannot blindly pursue construction schedules and costs while ignoring construction quality and neglecting the management of on-site construction personnel; For on-site construction personnel, each step of the operation will directly affect the safety of the building. However, the overall level of construction workers in China is relatively low, and the overall capacity cannot meet the needs of construction technology and functional diversity of buildings; For the supervision unit, when dealing with many quality hazards, the construction unit is often connived and the interests of the owner are ignored.

The factors of "people" can be controlled from the following aspects:

(1) Strengthen the supervision of the construction site.

The building unit sets up a special regulatory agency. For the selection of supervisors, it must meet the experience of the construction site, professional knowledge and strong adaptability, and can guarantee various emergency events. Supervisors should supervise every link in the construction process, especially concealed projects, and deal with the hidden dangers in a timely manner.

(2) Make every effort to improve the quality and skills of construction workers. When selecting a construction team, it is necessary to pay attention to its operational skills and overall quality; Conduct pre-job training to strengthen the sense of responsibility and professional skills of construction workers; During the construction process, a series of trainings will be conducted to understand new technologies, new skills and new specifications.

(3) Improve the responsibility system and clarify the jurisdiction of each individual. Each part of each construction link corresponds to a responsible person, which is conducive to reducing quality risks. If there is a problem, the responsibility will be pursued.

3.2 “Materials” Factors and Their Control Measures

Improving the construction quality of building construction projects can effectively ensure the overall quality of the project and the progress of the project. The improvement of construction quality effectively curbs accidents, reduces post-maintenance costs, reduces the risks of project participants, and maximizes economic development.

The performance of building materials has an important impact on the quality of buildings. Commonly used building materials are steel, cement and concrete. At the present stage, some construction materials that have been put into use in China have not been tested, such as refilling steel bars and insufficient cement strength, which not only has hidden dangers, but also directly threaten

the safety of the construction workers on site. Therefore, strict inspection of raw materials is required to enter the construction site.

The "material" factors can be controlled from the following aspects:

- (1) Strict screening of material suppliers, selection of manufacturers with good reputation and corresponding qualifications and establishment of long-term cooperative relationship. In this way, not only the quality of the raw materials is ensured, but also the purchase cost of the materials can be effectively reduced.
- (2) Prepare the materials in advance to place the site, and determine the order of purchase according to the order of use of the materials. For the raw materials entering the site, you can't stack them at random, and make sure their performance is intact. To prevent material build-up and performance degradation, the order of purchase of materials is based on the order in which they are used.
- (3) Strictly control the quality of materials. A sample inspection is required before the material is put into use. For example, bagged cement with a production time of more than 3 months must be re-inspected before use [1].

3.3 “Device” Factors and Their Control Measures

Construction equipment is an important tool for completing building construction projects, which can meet the functional requirements of buildings and reflect the corresponding construction techniques. To ensure the quality of construction, it is necessary to introduce instruments with excellent performance, simple maintenance and flexible operation. For equipment entering the construction site, it is often neglected to conduct trial operation inspection, resulting in series failures in use, delaying construction period and increasing costs. At the time of completion acceptance, the acceptance personnel tend to pay more attention to whether the quality of the civil works is up to standard, and less considers functional supporting facilities, such as water supply and power supply systems. When the user puts into use, there will be problems such as heating pipe circulation problems and electric overload [2].

The "device" factors can be controlled from the following aspects:

- (1) When purchasing construction equipment, it is necessary to pay attention to the completeness of the equipment and the completeness of the certificate.
- (2) Establish a equipment management team to conduct pre-job training. Training knowledge includes not only the use of various equipment, but also the maintenance and repair of equipment. Arrange for regular inspection of construction equipment to prevent problems during use.
- (3) Improve the functional inspection of supporting facilities when the completion acceptance is completed.

4. Conclusion

In summary, with the quality control measures of “people”, “materials” and “equipment”, the construction quality of building construction projects will be effectively improved. Enterprises not only create objective economic benefits, but also improve their own competitiveness. Therefore, in the future construction process, all aspects should pay great attention to construction quality control to reduce the incidence of construction accidents and promote the continuous progress of the construction industry.

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