

Analysis on the Whole Process of Green Building Intelligent Engineering

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Abstract: With the acceleration of China's urbanization, more and more regions begin to pay attention to the construction of green buildings, to ensure that the whole life cycle of housing can effectively save money, environmental protection, reduce environmental pollution, and can meet people's needs for health, applicability and efficiency, to achieve harmonious coexistence with nature. "Green building" aims to build a building that meets the environmental requirements and can make rational use of natural resources to ensure that it does not damage the basic ecological balance of the environment. Therefore, this paper for the green building intelligent engineering consulting work of the whole process of the corresponding analysis, for reference only.

1. Introduction

In the process of developing green building projects, the construction units must adhere to the concept of green development, strictly abide by the relevant policies and regulations, and ensure that the quality of the project meets the green environmental protection standards. The consulting agency should adopt the whole-process management mode to further improve the quality and service level of the construction project, and strictly require the behavior of all stages from the engineering design to the operation. This can effectively avoid the waste of resources, save a large amount of funds, accelerate the construction progress of the project quality, ensure the efficient implementation of the construction project, bring greater economic benefits to the enterprise, and promote its long-term and stable development.

2. Related overview

2.1 Overview of the whole-process consultation mode

"Whole process consulting" is a comprehensive, cross-engineering project management system, it covers the early application research, reasonable selection, execution control, later operation control and other links, provides comprehensive support for the success of the project, is a revolutionary model. In order to better meet the demand of the market and improve the level of construction projects, the whole process consultation is included in the relevant provisions, so that the whole process consultation can be implemented. It not only integrates the construction bidding business, survey planning, technology and other fields of information, but also can achieve an

integration, so as to better meet the needs of customers. The whole process consultation is a complete service covering the preliminary research, implementation and completion of the project. It comprehensively solves the problems in the project, from the whole to the details, in order to meet the needs of project management. As an advanced management method, the whole-process consulting service has significant advantages: it can break through the traditional management framework and improve the return on investment of project management^[1].

2.2 Overview of green building technology

With the progress of The Times, human beings pay more and more attention to the pursuit of spiritual level, and are no longer satisfied with material satisfaction. Therefore, sustainable development has become the mainstream development strategy of our country. When it comes to sustainable development, we have to mention the green economy and green ecology, which are everywhere and constitute a complete green system. Green building technology aims to reduce environmental pollution and damage by effectively utilizing the renewable energy of buildings, and saving various natural resources such as water, electricity, soil, and materials, so as to meet human needs^[2]. The application of green building technology can greatly improve the quality of life of human beings. It can not only save money, but also protect the environment, so that human beings can enjoy the beauty of green ecological building in a safe, comfortable and convenient environment. The emergence of green building technology can not only significantly improve the living conditions of human beings, but also promote the harmonious coexistence of buildings and nature. It can effectively prevent and control the risks of project management, ensure that the work conforms to various norms, and contribute to the supervision of the government. In addition, the whole-process consulting service can also improve the industry value of project management and improve the quality of project management, thus promoting the development of the construction industry^[3].

3. The key point of integrated management in the whole-process consulting mode

3.1 Clarify the requirements of the whole process of consultation

Although many construction units have a relatively long consulting service cycle, the staff should make full use of their own resources in order to effectively control and assist in the completion of the project. Therefore, the staff should put their own resources and technology into the consulting services and control of the project to ensure the smooth completion of the project. By adopting a complete whole-process consulting management, it is suggested that the construction party conduct a detailed analysis at the initial stage of the project, and formulate the project design scheme in accordance with relevant laws and regulations. At the same time, in order to ensure the success of the project, the construction party must also ensure that the budget of the project is in line with expectations, and the cost of the project is in line with expectations. In addition, the construction party must also clearly know the specific requirements of the customer, and clearly know how to carry out intelligent project design, so as to better complete the project budget. Enhance the effectiveness and feasibility of the task book by trying to improve its content and method^[4].

3.2 The design and selection of multiple schemes

In the process of green building intelligent engineering design, the consulting institutions should effectively communicate with customers, hold regular engineering design meetings, and invite

customers' management personnel to participate in the discussion. After understanding the needs of customers, consulting agencies should build an intelligent consulting system according to the actual situation of customers^[5]. When the consulting agency designs the intelligent management scheme, the staff needs to fully consider the use characteristics and practical application of the project, and determine the number of systems. Workers then design the functions of the individual system based on the information. At this stage, the staff can provide some valuable suggestions directly to the application unit. Within the construction unit, the relevant staff should carefully study the suggestions of the application unit, combined with the actual situation, develop a variety of intelligent management plans, so as to compare from the perspective of application and maintenance management, to determine the best scheme, and conduct feasibility analysis, to ensure that they can meet the actual needs of the application unit. We can see the intelligent design, before the engineering construction bidding, the construction personnel need to calculate the total amount of intelligent engineering, to avoid leakage problems, special attention is the data room, UPS room, weak position, should reserve redundant space, and handed it over to the strong electricity professionals, in the design process we should reserve part of the power.

3.3 Intelligent preliminary design link

In order to ensure the quality of the project, the consulting agency should describe the problems involved in detail according to the content of the project plan, and formulate the appropriate workflow according to the information. At the same time, it should arrange the workload reasonably according to the actual situation, and strictly abide by the relevant technical guidance and quality assurance measures. In addition, more attention should be paid to intelligent management, and all the details should be recorded, so as to play an early role in the construction process. When starting with writing engineering drawings, it is recommended that the consulting body define the objectives of each management system and make detailed plans for their application scope. Since the construction and installation of a building are greatly related, if effective intelligent measures are not taken, design defects may occur, leading to later changes or the addition of new elements, thus affecting the overall construction quality. In order to avoid this situation, it is suggested to take measures as soon as possible to realize the overall intelligent management, so as to improve the installation quality of the building. As a mechanical expert, consulting institutions should have in-depth communication with technical experts, and conduct detailed research and evaluation of the needs of intelligent systems according to different technologies and application scenarios. In this way, the consulting agency can ensure that the design scheme of the construction unit has a high integrity and contribute to future intelligent applications.

4. Measures for the whole process of green building intelligent engineering

4.1 Strengthen the quality management in the design stage

With the promotion of environmental protection consciousness, green building engineering policies, regulations, standards, identification, etc also need to improve, to ensure their effective implementation, relevant departments must set up an effective, scientific, sustainable, professional, measurable green building project evaluation mechanism, to ensure that the late green building engineering sustainable and effective operation. The design process of a building is very important, which not only determines the success or failure of the building, but also determines the quality of the building. If there is no effective supervision, it is likely to lead to the decline of the quality of the building, and may even cause serious consequences.

In order to promote the sustainable development of the building, the supervision unit must

strengthen the supervision of the design process of the building, and strictly implement the provisions of the green building intelligent engineering construction, so as to effectively promote the sustainable development of the building. Management department shall strictly implement the system of construction drawing audit, as much as possible test the whole process of green building intelligent engineering consulting work, make it conform to the green building standards, to ensure the accuracy of survey design, completeness, and the reliability of the measures, so also can to a certain extent at the beginning of the construction project to achieve good quality control, to ensure the smooth completion of the project. To ensure the smooth progress of the project, the consultants must adopt a more efficient approach to consulting and managing the entire project, which includes establishing an efficient communication and coordination mechanism and strict supervision of the project progress. At the same time, the various project contractors must also maintain good coordination to ensure that the project is completed on time.

4.2 Strengthen the quality supervision during the construction stage

In the construction process of construction engineering, strict quality control is very important, in order to achieve the best effect, the construction unit needs to carefully select the appropriate construction technology, use the most advanced equipment, and carefully arrange the effective construction plan, in order to effectively control the construction process, so as to achieve the best building effect. The construction time of green building projects is significantly reduced, which makes their construction cost greatly reduced, and their construction process is more environmentally friendly, which just proves the importance of green building construction management. They not only affect the construction process of the building, but also affect the entire service life of the building. In order to ensure the sustainable development of green construction, consultants need to improve and optimize the quality control and management, to ensure its good sustainability and controllability, a comprehensive study and analysis may lead to lower construction quality of various factors, preventive measures as soon as possible to ensure that the final construction structure meet environmental standards.

In order to ensure the quality of the construction, the consultants must continuously improve the materials, technology and equipment used, and the staff members also need to carefully record all the relevant information to prevent interference from the external environment. Consulting agencies must also strengthen communication with all relevant parties to ensure that the staff of the construction unit can be more focused on completing the construction goal of green building intelligent engineering. Consulting should be for each relevant personnel develop a set of perfect, targeted, can make staff more actively to complete the consulting target of green building construction requirements, and in the process of drawing review, consultants should put forward effective review Suggestions, and in the design institute after receiving review opinions, should be according to effective rectification, to ensure that will not appear any omission. In addition, the design drawings and schematic drawings of intelligent management must also be consistent, and after the completion of the preliminary design, the approval documents must be submitted to the relevant government departments in time.

4.3 Special supervision at the guarantee acceptance stage

Green building construction is to make the building with energy-saving and environmental protection function, effective control of harmful pollution. Green building can achieve the purpose of energy conservation and environmental protection through the natural environment. This advantage of green building can not only reduce the overall load of the building, but also create a comfortable and safe building environment for the building, and then play a role in promoting

environmental protection, construction and development and harmonious nature. In the green building acceptance stage, the content of the special acceptance system must be strictly implemented, and the direct participation of users must be realized at the same time, which is conducive to improving the overall quality of green building projects, greatly improving user satisfaction, and basically realizing the goal of the special supervision and acceptance stage. Some construction projects in the completion acceptance stage, due to the design, construction and other links management is not strict enough, the effect is not very good, it is easy to reduce the supervision in the early stage and the process of the project.

In addition, in order to improve the overall quality of construction projects, effectively safeguard the rights and interests of building users, need to actively solve the traditional user participation shortage, green building value and technical measures can be incorporated into the relevant documents, keep encouraging attitude for the corresponding work, effectively check green construction project performance indicators and engineering quality, effectively realize the purpose of special supervision acceptance stage, to realize the green building management process provide important support, promote the construction of high quality green building in China. In short, the intelligent consulting management in the whole project management process, can predict the problems existing in the project in advance, strictly control the quality of design and construction link, control from the root, reduce the problem of rework possible errors in the project, through the project using consulting management comprehensive implementation of comprehensive evaluation, consultants can provide more comprehensive service for construction units. Therefore, it is necessary for the staff to integrate the concept of green building into the project construction, and to do a timely and accurate job of control and consultation work at each stage.

4.4 Promote the supervision and management in the operation stage

Through intelligent management, the construction unit can obtain more accurate prediction and control, while the supervision unit can implement effective target management and control, which are completed by the whole process of consulting and management unit. At the construction site, the consulting agency and the supervision unit should pay special attention to ensure the smooth communication between the two parties, and the effective management can be carried out before the bidding to ensure the construction quality. In the design disclosure work, the consulting agency should especially emphasize the importance of the supervision unit to the construction design drawings, and in the process of joint review of the drawings, the existing problems must be strictly examined and handled. In case of a major design change, a review meeting shall be held. Only after the approval, the construction unit can adopt the changed scheme for construction. The green building concept is integrated into modern buildings, the whole building structure is optimized through the green building concept, and the architectural design and transformation are optimized combined with the principles of wind energy and light energy, so as to achieve the purpose of energy-saving energy and optimize the environment. In the operation stage of green building, it is an important link to test the quality and effect of buildings. The main direction of green building development should be oriented by operational efficiency.

Based on relevant standards and systems, it plays a limited role in the actual implementation of green building technology. In the process of green building engineering construction, the relationship between operation and management has a certain positive significance for ecological construction, social and economic benefits and other purposes, and promotes the organic combination of operation and management mode and green concept. In fact, it plays a certain role in ensuring the efficient implementation of green performance in the operation stage. In addition, in order to do a good job in the monitoring and management of green buildings in the operation stage,

relevant departments need to actively establish and improve the corresponding monitoring mechanism, and ensure that the environment and buildings play a full role, such as environmental greening, rainwater recycling, garbage treatment, etc. On this basis, we need to make full use of advanced technology, establish intelligent service management system and operation stage safety technology, better achieve comprehensive coverage and real-time monitoring of green building detection content, effectively improve the green performance and quality of the application, and truly realize the control of the whole process of green building.

5. Conclusion

In conclusion, in order to adapt to the rapid development of today's society and ensure the sustainability of buildings, consulting agencies must pay more attention to and emphasize the overall control of green buildings. This can not only promote the sustainability of the buildings, but also ensure the safety of the buildings, so as to achieve a win-win situation. In order to achieve this goal, the consulting agency needs to clarify the definition and standards of green building projects, and continuously improve the control methods of the projects, in order to achieve win-win coordination between economy and environment.

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