

*Original Research Article*

## Practical Value and Development Prospect of Green Building Design in the New Period

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**Abstract:** Relevant research points out that as one of the lifeblood industries of China's economic development, the development of construction industry is related to the national economy and people's livelihood. Therefore, in the new historical period, in order to further realize the rational development of China's construction industry, a large number of construction industry practitioners have conducted in-depth analysis and exploration on the development direction of China. After analyzing, the researchers said that with the continuous improvement and strengthening of public awareness of environmental protection, in the future, China's construction industry should focus on energy conservation and environmental protection. Based on this, relevant staff put forward the idea of "green building design", aiming at effectively guiding China's construction industry to achieve rational transformation. In this paper, the green building design work is taken as the breakthrough point, and the main problems existing in the green building design work in China in the new period are analyzed reasonably. At the same time, the corresponding optimization strategies are put forward, aiming to guide the construction industry workers to further realize the understanding and understanding of green building design, and then lay the foundation for the development of China's construction industry.

**Keywords:** Construction Work; Green Building Design; Main Points of Work; Main Problems; Development Prospects

From the perspective of development, at present, driven by economic development, China's construction industry is experiencing an unprecedented period of vigorous development. During this period, a large number of construction projects have been carried out and implemented in an orderly manner. However, at the same time, the times also put forward brand-new challenges to the development of construction projects<sup>[1]</sup>. In this regard, the researchers said that in the new historical period, traditional construction projects have been unable to effectively meet the daily needs of the people. Based on this, it has become an important problem in the development of China's construction industry<sup>[2]</sup>. In this regard, the researchers said that in order to better meet the cur-

rent people's demand for environmental protection, the construction industry should actively explore the green building design work, so as to effectively reduce the environmental pollution caused by construction projects and effectively realize the practice of the concept of "harmonious coexistence between man and nature".

### 1. The green building design concept

Researchers say that the essence of green building design is to effectively realize the penetration and integration of environmental protection concepts in the process of building and design, so as to effectively realize

the reasonable saving of various resources by construction projects, and at the same time reduce the impact of related projects on the surrounding natural environment, so as to realize the peaceful coexistence between man and nature. Generally speaking, this architectural concept effectively conforms to the demands of the current public for environmental protection, which is conducive to the sustainable development of the construction industry and has a good driving value for the development of the construction industry.

## **2. The principles of green building design**

### **2.1 The principle of energy saving**

Generally speaking, in the process of green building design, relevant personnel should actively pay attention to the energy-saving problems of construction projects, so as to reasonably reduce the amount of resources used in the project, avoid the meaningless waste of a large number of resources, and lay a solid foundation and guarantee for the promotion and optimization of resource utilization rate in China. At the same time, the researchers pointed out that through the reasonable practice of the principle of energy saving, designers can effectively realize the scientific application of a large number of resources in the project, thus providing the possibility for the scientific use of energy such as water, electricity, light and heat. At the same time, this measure is conducive to the improvement of residents' comfort and has positive value for the optimization of construction engineering quality.

### **2.2 The principle of sustainability**

For architectural engineering, green building design requires designers to actively carry out the sustainable development of related resources in the project, so as to effectively realize the construction of micro-ecosystem, so as to provide the possibility for the optimization of architectural engineering. On the whole, this principle effectively emphasizes the integrity and circulation of architectural design, thus reducing the cost of project management and providing power for the reasonable guarantee of project quality<sup>[3]</sup>. For example, in the aspect of water resources utilization, through the establishment of circulation system, the construction project can effectively realize the rational utilization of water resources,

which has a good promotion value for the improvement of water resources utilization rate and the implementation of resource protection work.

### **2.3 The principle of health**

The principle of health advocates that when designing related projects, designers should actively pay reasonable attention to building users, so as to focus on the concern of "people". Practice shows that through the application of this principle, it is beneficial to realize the rational application of all kinds of resources in the construction project, and has a good impetus to the promotion and improvement of the livability of the project.

## **3. The main factors affecting the development of green building design**

### **3.1 The lack of attention of construction enterprises**

At present, in the development of the construction industry, the management concept of some enterprises is relatively traditional. Based on this, in their daily work, they focus on issues such as construction cost control and market development, while the attention to green building design is relatively low, which is not conducive to the rational implementation of green building design in the construction industry<sup>[4]</sup>. In view of this problem, the researchers pointed out that the existence of this wrong view has greatly restricted the wide application of green building design in China's construction industry, which is not conducive to the promotion of the comprehensive level of China's construction projects. At the same time, from the perspective of the daily work of the enterprise, it is difficult for the relevant staff to achieve a reasonable attempt for the green building design in the architectural and design work, which is not conducive to the promotion and optimization of the green building design level.

### **3.2 The weak staff professional ability**

In the process of architectural design, as a new concept, green building design has relatively high requirements for the professional ability of design talents. However, at present, the number of green building design talents in China is obviously insufficient. The professional ability of relevant design staff is relatively weak,

which makes it difficult for them to carry out reasonable design of construction projects from the perspective of overall view in the design process, which is not conducive to the reasonable guarantee of integrity in the design work. At the same time, due to the relatively low professional level, the schemes designed by designers often have problems such as waste of production materials and unreasonable design links, which is not conducive to the effective implementation of the principle of sustainable development of construction projects and hinders the improvement of the comprehensive quality of construction projects<sup>[5]</sup>. In addition, due to the lack of professional knowledge, it is often difficult for some designers to guarantee the scientific design, which has a very negative impact on the improvement and perfection of the comprehensive quality of design work.

### **3.3 The less experience in green building design**

From the perspective of industry development, at present, as a new architectural design concept, the development time of green building design in China is relatively short. Based on this, a large number of construction enterprises have not effectively realized the reasonable construction of green design system. At the same time, its application experience in the daily design process is relatively less, which is not conducive to the rational development of green design. Researchers said that from the perspective of development, due to the lack of relevant experience, it is often difficult for enterprises to effectively implement the green design concept in the architectural design process, which has adversely affected the improvement of the quality of enterprise construction projects<sup>[6]</sup>. At the same time, in practice, due to the limitation of experience, enterprises tend to make wrong decisions, which adversely affects the improvement of comprehensive engineering quality.

## **4. The measures to optimize the level of green building design in the new period**

### **4.1 To actively innovate architectural concepts**

From the perspective of development, in order to further realize the rational application of green building design, construction enterprises should actively analyze

and explore related concepts in their daily work, so as to fully realize the guiding significance of green building design for China's construction industry, so as to actively explore green building design and provide good external conditions for related work. On this issue, enterprise leaders should take the lead and actively strengthen the in-depth study and analysis of green building design theory, so as to drive enterprise employees to actively carry out analysis and exploration of related theories, thus providing power for green building design in daily design work of enterprises. At the same time, in the process of enterprise architectural engineering design, we should actively try and scientifically demonstrate the concept of green building design, so as to effectively realize the accumulation of enterprise green building design experience.

### **4.2 To carry out reasonable training of designers**

On the issue of staff, in order to effectively realize the rational implementation of green building design, enterprises should actively strengthen the training of design staff, so as to help them better understand the concept of green building design and apply relevant concepts to the daily design work of enterprises, so as to lay a solid foundation and guarantee for the rational development of enterprises. On this issue, enterprises can help employees realize reasonable understanding and full understanding of relevant knowledge by organizing employees to study green building design theory on a regular basis, so as to strengthen their professional ability and accomplishment<sup>[7]</sup>. At the same time, in order to effectively improve and optimize the professional ability of the internal staff, enterprises should effectively introduce advanced talents, so as to reasonably improve and optimize the design strength of green buildings, so as to lay a foundation for the development and implementation of subsequent related work.

### **4.3 To effectively strengthen industry exchanges**

In view of the relatively lack of green building design experience in China at present, the researchers say that in order to better realize the harmonious development and implementation of related work, relevant enterprises should actively communicate and communicate within the industry, so as to effectively realize the ex-

change and promotion of green building design experience, so as to further realize the formation and construction of green building design system and lay a solid foundation and guarantee for the all-round development of China's construction industry<sup>[8]</sup>. On this issue, by holding regular industry exchange seminars, relevant enterprises can effectively realize exchange and communication, thus realizing the establishment and improvement of a good industrial system, which will play a good role in promoting the overall development of green building design. At the same time, by actively carrying out experience exchange, enterprises can effectively summarize and summarize relevant experiences and lessons, and help construction enterprises to avoid detours in the process of developing green building design.

## 5. Conclusion

Researchers say that in recent years, with the continuous improvement and optimization of urban development level, architectural engineering design has become a key issue affecting China's economic development. On this issue, in order to reasonably improve and optimize the quality of construction projects, relevant enterprises should actively explore and improve the direction of architectural design, so as to promote the rational application of the concept of green building design in architectural design, thus laying a solid foundation for improving and optimizing the environmental protection level of construction projects in China. At present, due to the lack of green building design experience in related work, it is difficult for a large number of enterprises to reasonably carry out related work in an

orderly manner in the construction design process, which is not conducive to the improvement and optimization of design work quality. Faced with this problem, enterprises should actively explore relevant solutions effectively, so as to effectively upgrade and improve their own green building design level, so as to lay a solid foundation and guarantee for the development of China's construction industry.

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