

Study on Application and Impact of Assembly Construction Technology in Building Residential Engineering

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Abstract: With the acceleration of China's modernization in recent years, the construction industry has developed rapidly and innovated. In such an environment, the construction cost increases year by year, and the emergence and application of assembly construction technology alleviate this problem to a certain extent. The application of assembly construction technology is more and more widespread, which can satisfy the increasing demands of people nowadays. The diversity of functions can also ensure environmental protection and energy saving. The design of assembly construction makes up for the shortcomings of traditional construction technology in the past, enlarges the advantages of traditional construction technology and integrates them. Quality has been greatly increased and work efficiency has been continuously improved.

1. Introduction

In the context of the continuous improvement of China's economic level, the mastery of science and technology is increasing. The arrival of the new era and the construction of modernization are constantly promoting the development of China's construction industry. Therefore, the competition in the construction industry is becoming more and more fierce. The emergence of assembly construction technology makes the main content of enterprise competition change from quantity to quality, which is also of great benefit to the society. What's more, nowadays, the national standards and standards for the construction industry are becoming more and more strict. Only better construction technology can make the construction industry occupy a foothold, and people pay attention to the functionality, safety and comfort can be further satisfied. Therefore, the assembly building engineering is a great progress for the construction engineering. The construction technology of the assembly building can better control the quality of the building.

2. Construction Technology of Assembled Buildings and Assembled Buildings

2.1 Definition of Assembled Buildings

Under the background of China's modernization construction, the improvement and progress of industrial technology and construction industry can promote the improvement of building quality and the diversification of housing construction methods. Assembled building is the construction of buildings in advance in construction projects, to the site construction can efficiently complete the work, building construction efficiency has been greatly improved.

Nowadays, the social economy has been greatly improved, and the whole society is progressing. People have a higher pursuit in all aspects, especially in the aspect of living standards. The advent of a new era symbolizes that people's ideas are more advanced and that they have a deeper understanding of government policies. Housing construction is a very important issue for people, which is related to people's daily life and work. People's high demand for life also makes people pay more attention to the environmental protection of buildings, which can not only improve the general environment of people's lives, but also optimize the small environment of people's lives. Therefore, assembly building has become the main content in the construction industry. The

combination of assembly building and assembly building can better meet people's needs and better develop environmental protection and construction.

2.2 Characteristic of fabricated building construction

The construction of assembly building has changed from traditional manual operation to mechanized operation, which greatly improves the construction efficiency. The construction site has been changed from traditional construction site to factory construction; the construction mode has been changed from on-site construction to on-site assembly; and the construction workers have also changed from traditional peasant workers to professional technicians. China and even the whole world are vigorously promoting low-carbon environmental protection in order to win people's hearts and minds. In this context, it is particularly important to implement low-carbon environmental protection policies in industries with serious environmental pollution. Building materials, construction techniques and construction schemes in the construction industry are liable to cause air pollution, such as dust pollution. Therefore, the implementation of assembly building and assembly building have been vigorously supported and developed. It can be said that assembly building in architectural design is not to protect the environment from the surface, but to carry out assembly building from inside to outside, from green materials to assembly building, and achieve the purpose of assembly building. For our country's architectural design, assembly building can further optimize the construction industry. The low-carbon environmental protection policy of the construction industry can vigorously promote the cause of low-carbon environmental protection.

At present, China's assembly technology is still in its infancy. There are still some problems, such as mismatch of assembly proportion, immature technology and inadequate quality supervision. To this end, the relevant departments have issued a series of relevant policies, which provide strong support for the development of assembly building. The concepts of energy-saving and renewable technology can be applied to architectural design and give full play to its advantages. Assembled building not only pursues environmental protection, but also pays attention to beauty. Therefore, it is necessary to coordinate the imbalance between assembly building and architectural design, and find a better scheme to combine the two. Protecting the environment is a national policy. Assembled buildings are the needs of residents. They coordinate with each other and common development is the direction of the people. More importantly, with the continuous improvement of China's overall economy, people will naturally have more needs and requirements. Better indoor environment is also an inevitable demand, which has more benefits for the life of buildings.

3. Characteristics of Assembled Architecture

Table 1. Characteristics of Assembled Buildings

Aspects of Assembled Architecture	Building materials	Environmental requirements
main feature	Mechanical manufacturing	Taking into account local human history
	Reduced error	Fully combine local specific factors
	Reduce the difficulty of the stitching process	Combine the local climate

3.1 Standardization of building materials

Compared with the traditional construction technology, the materials of assembly building are mostly manufactured by machinery, which greatly reduces the error, reduces the difficulty of splicing process and improves the comprehensive assembly quality of construction.

3.2 Environmental protection requirements are met

The environmental pollution of the construction industry mainly comes from the materials used

in the construction engineering and the construction methods used in the construction industry. Therefore, the optimization of the assembly building can play an important role in the construction process. When considering the raw materials needed for building, architects should fully analyze the existing conditions, carry out reasonable design and provide the corresponding building resources. In any case, they should also take into account the local human history, take into account the local unique factors, and combine the local climate, so as to make regional differences prominent. Method to conduct a comprehensive analysis. The building construction not only pays more attention to the appearance, but also takes into account the function of the building and the safety and reliability of the building. Under almost all conditions, control the output of resources and environmental pollution.

4. Assembled Construction Conditions in Construction Process

Table 2. Conditions for fabricated construction during construction

Assembly construction conditions	Land design	Production measurement equipment improvement	Energy saving technology
main content	No damage, no pollution	Modification of parts and processing equipment	Space design and construction mode
technology	Saving construction land design	Improve the precision, simplicity and efficiency of your measuring instruments	External wall insulation technology, composite insulation technology and external wall insulation technology

4.1 Government support and land-saving design methods

The arrival of the new era symbolizes that people's thinking is more advanced and their understanding of government policies is more profound. Environmental pollution is a very important problem for people, it is related to people's daily life and work. People's high demand for life also makes people pay more attention to assembly building, which can not only improve people's living environment, but also optimize people's small environment. In the specific design work, we should make full use of the construction site, make scientific planning according to the principle of no damage and pollution, and provide good protection to the surrounding environment on the basis of ensuring the construction quality. For example, for sloping land, the architect can design the garage in the form of half underground and half ground according to the topographic characteristics. This can reduce a lot of garage construction work. At the same time, the stability of the building is guaranteed. Therefore, the design of saving construction land can maximize the use of land resources and adapt to the current shortage of urban construction land resources in China. At the same time, by using the foundation form, the construction efficiency is improved, the construction cost is reduced, and the comprehensive benefit of the project is improved.

4.2 Improvement of production and measurement facilities

Factor decomposition of decorative parts can only strengthen the transformation of parts and processing equipment, to a certain extent, improve the quality and efficiency of construction. However, the current research focus is on how to better transform micro-computers into large data processors, so as to achieve efficient and high-quality assembly content production. Further improve the mechanization degree of large machinery, improve the precision, simplicity and efficiency of measuring instruments, improve the accuracy of equipment and improve the comprehensive quality of construction through accurate order quantity. According to the different

needs of different enterprises to design and adjust, these energy-saving technologies also include external wall insulation technology, composite insulation technology and external wall insulation technology. In addition, lighting in architectural design is reflected in energy-saving lighting technology and frequency conversion technology. Energy consumption of air-conditioning equipment should also be vigorously innovated to ensure that more energy-saving air-conditioning, lighting and frequency conversion technology have been used for energy-saving air-conditioning. To some extent, energy-saving air-conditioning has been realized.

4.3 Improving the Matching Materials and Related Technologies for Construction Enterprises

In the process of construction, enterprises need to strengthen the quality control of supporting materials, strengthen the quality assurance of overall construction, constantly improve the quality control methods, and talk about the practical application value of prefabricated structure in commercial development, so as to better guarantee the comprehensive effect of construction. Assembled buildings can be reflected in the layout of architectural space. In the construction process of architectural decoration and decoration projects, excessive use of decoration materials and waste of architectural space will also lead to environmental damage. Assembled buildings can better layout design of architectural space layout, and to a certain extent, energy losses and energy losses. Make reasonable arrangements for utilization. At present, the assembly building should not only consider the problem of green environmental protection, but also consider the comfort of the residents' living comprehensively. Architectural design and planning are mainly carried out through space design and construction mode. Therefore, assembly building analysis can be added to simulate the ventilation and noise of buildings, so as to rationally optimize these parts, eliminate unreasonable factors and solve necessary problems. Because if we want to add the concept of green environmental protection in architectural design, we can make full use of the design and construction of assembly buildings by analyzing the influencing factors, exploring the unique local characteristics and eliminating the influencing factors, so as to better integrate assembly buildings and ecological technology, and changing the layout of architectural design according to climate change and solar angle. Build, make full use of ecological resources, add ecological technology to them.

5. Conclusion

Nowadays, the standards and regulations of the construction industry are becoming stricter and stricter. Only better construction technology can make enterprises stand firm in the construction industry and further meet the functional, safety and comfort that people pay attention to. Prefabricated construction technology has been applied more and more extensively, which can meet people's requirements and increase content. Functional diversity can also ensure the awareness of environmental protection and energy conservation. Prefabricated building design makes up for the defects of traditional construction technology in the past, expands the advantages of traditional construction technology, greatly improves the overall quality and improves the efficiency.

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