

Application of Green Construction Technology in Housing Construction

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1 The Concept and Characteristics of Green Construction

Economic development will inevitably promote the development of the construction industry, and gradually make it become a pillar industry of our country. However, it results a large amount of consumption of civil resources and the destruction of the green environment, which violates the requirements of sustainable development putting forward by our country. Therefore, green construction is carried out within the scope of the cycle basing on environmental protection, so as to reduce the ecological destruction.

Green construction aims at environmental protection, focus on saving natural resources and protecting the environment, in order to maintain the harmony between society and nature. Seeing from the current world development and application, green construction technology can effectively improve the efficiency of construction projects, speed up the progress of construction and ensure the overall quality of the construction at the same time which can satisfy residents well. Overall, the green construction technology, with a clear purpose, to ensure sustainable development and utilization of resources for high quality and safety of construction projects.

2 Principles of Green Building construction

2.1 Principle of Harmony

Harmony is always emphasized whether in constructing or using process of green construction which decided by building itself background. The factors influence it are variety, such as building materials consumption in constructing process, illegal renovation in using process and environmental pollution when demolishing which accompany with some resource depletion and pollution. So the harmony is more important.

2.2 The Principle of Local Conditions

In designing housing projects, although innovation principles should be embodied, more important thing is to respect the local customs and traditional culture which can reflect the unique style better and maximize the utilization of land resources. To do this work, not only can maximize the use of local resources, but also make the limited energy to play the biggest role. Therefore, in the process of designing housing construction project according to the principles of sustainable development, it must have a deeper understanding of local objective law and the actual situation of the construction site to ensure the scientific design and technology and provide better service for the people.

Abstract: The urbanization process is accelerating continuously and the floors that high-rise residential building construction needs gradually increased, which will cause relatively more waste and more water resources and land resources to be used. Besides it will affect people's normal life as well as the surrounding environment. For this case, it is urgent to take green environmental protection technology with less consumption resource which also has been highly supported by the housing construction unit.

Key words: Green construction technology; Housing construction; Application

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2.3 Economic Principle

Construction enterprises must have a correct understanding of the green construction technology and realize the positive role of this work for economic development. To be in compliance with the principle of green design, it uses the most appropriate technology to better reflect the local architectural features and creates a more comfortable living space for people. As all of the housing construction project cost can generate benefit, it does not need to use cheap raw materials to save cost, but to introduce a variety of advanced and new building materials and energy as far as possible.

3 Specific Application of Green Construction Technology in Housing Construction Project

3.1 Application of Soil Protection Technology

Green construction technology can increase surrounding environmental protection when building houses though, increasing the protection of the underground also should be noticed which can be reflected in the following aspects: 1. To prevent the corrosion. When constructing, fast-growing plants need to be planted, so as to degradate the pollutants timely and reduce the soil pollution; 2. More surrounding protection when constructing to prevent soil and water loss; 3. For more waste in the construction process, they need to be timely handled to avoid pollution.

3.2 The Use of Concrete Reuse Technology

When doing building construction, it is difficult to correctly determine the amount of concrete. For ordinary building construction, it is easy to produce residual concrete block which

will cause more serious waste and intense pollution if without timely treatment. But through the concrete recycling technology, it can prevent the emergence of such a situation through decomposing the residual concrete and after to repeat processing to reduce the construction cost which can prevent waste and increase economic benefits.

3.3 Building Used Formed Steel Products Processing Technology

The reinforced material is of particular importance for building construction technology. In the present stage of the construction process, for support personnel, it is difficult to design and process in accordance with the relevant requirements of steel as well as to transport timely. As the construction site is limited, and the requirements of steel is too high which not allow to be placed too long time, so transport is urgent. If transporting in time, not only construction space can be saved, but also avoid the difficulty of transportation and therefore reduce the construction time and improve the efficiency of construction.

3.4 Solve the Dust Pollution

If there is dust pollution, it will seriously affect the daily life of people around the construction site, and also threaten construction personnel life safety. So through the use of green construction technology, problems can be solved like releasing the impact caused by dust pollution. While how to avoid the dust pollution in the construction seems necessary. We need to monitor the construction site in time, and strengthen the control of transport to avoid the mess or dust appearing in the process.

3.5 Reduce Noise Pollution

To carry out the housing construction, it

will inevitably affect the production life of nearby residents, therefore before actual construction, we must formulate related control scheme for noise. During the construction, we must conduct a comprehensive, strict control of sound and vibration, and ensure the spread of the noise does not exceed the specified range. In general, the sound source and dissemination can be controlled in the construction process, so the construction team must choose the construction facilities of low noise and small vibration as far as possible and process noise.

4 Conclusion

In the process of housing construction, the application of green construction technology is very extensive, and it has become an important trend in the development of the construction industry which can effectively alleviate the problem of insufficient resource utilization. Through the application of green construction technology, it can achieve energy saving to the maximum extent, bring minimum impact on the environment. In the actual construction process, we are required to follow the concept of green construction, and insist on innovating green construction technology to create a green engineering project and lay a good foundation for the sustainable development of society.

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