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Research on the Importance of Architectural Design for Sustainable Urban Development

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Abstract: Under the new situation of social development, architectural design should dare to break the traditional design concept, keep pace with the times, integrate diversified creative elements, and promote the sustainable development of the architectural industry. At present, the pace of urbanization continues to advance, architectural designers should set up the concept of sustainable development, fully consider the role of architectural design on the sustainable development of the city.

Keywords: Architectural design;Urbanization;Sustainable development

1. Introduction

With the great improvement of economic level, China's construction industry has entered the stage of vigorous development. From the perspective of urban sustainability, the state vigorously promotes the development and application of new technologies for environmental protection and energy conservation. Construction industry is an important pillar industry of national economic development. Optimizing architectural design is equivalent to reducing construction pollution from the source, which is conducive to improving the ecological environment and plays an extremely important role in promoting the sustainable development of urbanization[1].

2. The Importance of Architectural Design in the Sustainable Development Of Cities

2.1 An Important Means of Urban Planning

Architecture is the main part of the city, under the background of continuous urbanization, the construction industry is booming. As the level of design continues to improve, the blueprint of urban planning also needs the support of architecture. People's demand for architectural functions is gradually diversified. If the architectural design caters to the market blindly, it may cause resource waste and environmental damage. Therefore, designers must start from the requirements of urban planning, make the project construction and ecological environment coordinated development, make the building area more harmonious, so as to promote the realization of urban planning development goals.

2.2 Highlighting Urban Features

Shaping a good city image is one of the important tasks of urbanization development, which is conducive to the growth of regional economy and the improvement of people's material life. Architecture is the basic form of urban image expression. Most people know a city through architecture, and every remarkable city in the world has its representative architecture. The optimized architectural design can effectively show the development concept, cultural characteristics, humanistic feelings of the city, so that the city shows a unique style, use the outstanding characteristics to attract various resources, so as to bring vitality to the urbanization construction.

2.3 Verifying the Rationality of Urban Planning

Urbanization development is a complex, continuous and constantly adjusting process. In the process of urban planning, there are many typical cases of planning failure. The architectural design needs to pass the scientific feasibility study, as well as the comprehensive analysis demonstration. Architectural design and urban planning complement each other. Through architectural design, potential unreasonable problems in urban planning can be found, which is beneficial to adjust the direction of urban planning in the early stage and improve the level of urban sustainable development[2].

2.4 Reducing Environmental Pollution

Under the concept of sustainable development, architectural design presents the building - environment - ecological planning framework, so the designer should pay attention to the coordination of construction and environmental protection comprehensive consideration, the relationship between buildings and environment positive ecological concept of environmental protection into architecture design work, in order to reduce pollution hazard of the construction of ecological environment in the various sectors, improve the building enterprise social benefits. In the current construction industry, some construction enterprises blindly pursue economic benefits, in order to reduce the cost of construction, the use of poor quality, not environmentally friendly building materials, the lack of scientific planning of the building environment, which is easy to cause serious damage to the ecological environment. In view of these problems, the relevant departments must strengthen the supervision of the construction market, requiring construction units to start from the concept of sustainable development, the application of green construction materials and energy-saving and environmental protection technology, to achieve the harmonious development of architecture and ecology.

3. Countermeasures to Fully Reflect the Importance of Architectural Design for Urban Sustainable Development

3.1 Development of Land Resources

Architectural design occupies a large area of land, and under the background of decreasing available land resources in China, architectural design should pay more attention to the rational use of land resources. Designers in the layout plan will be the main structure of the building, green, road, used equipment and other indicators to implement one by one, under the premise of ensuring the safety and smooth construction process, improve the utilization rate of land resources. During temporary construction of construction projects, large areas of land occupation and waste should be avoided. For example, relatively flexible light steel should be used for fencing, and construction waste should be piled centrally to effectively save construction land.

3.2 Design of Landscape Greening

In the design of building greening, it must be organically combined with the geographical conditions of the site. A large area of green space is set up in places with relatively concentrated stream of people, so as to ensure that people can enjoy a good visual feast. For other green belts, they are generally arranged around people's rest areas or along commercial streets. For dry large platform roof, the fifth facade of dry building can be reasonably applied to effectively carry out green design, so as to ensure the comprehensive display of green natural ecology. For different elevation areas, gradient or gentle slope greening can not only enhance the level of green space, but also promote the development of municipal engineering and promote the sustainable development of urbanization construction.

3.3 The Utilization of Low Carbon Environmental Protection Materials

In the process of architectural design, the ecological environment should be fully respected, and the low-carbon environmental protection materials will not release toxic and harmful substances to achieve the protection of the ecological environment around the building. After the World Climate Conference in Copenhagen, low-carbon environmental protection materials have mushroomed. The application of such materials is based on the premise of respecting the ecological environment, reducing the use of fossil energy, reducing carbon dioxide emissions, and realizing the coordinated development of architecture and ecology.

4. Conclusion

Architectural design is very important for the sustainable development of a city. Therefore, it should be fully considered in many aspects such as city, society and humanities. At the same time, it should integrate the concept of green building, based on design innovation and integration, so as to ensure that the concept of green building can further conform to the development of the times. On this basis, it will provide an important driving force for the sustainable development of society, city and construction industry.

References:

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