# **Application of Green Design Concept in Interior Design**

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**Abstract:** In today's information society with rapid development, what should be advocated now is the green concept. Whether it is environmental protection or interior design and decoration, environmental protection will be an inevitable trend. The concept of green design is to apply the idea of environmental protection to our interior design. At the same time, it also has certain requirements for designers. Designers must analyze the environment, rationally apply the existing resources and materials, and strive to minimize the pollution to the outside world. After applying this concept, it can also produce favorable factors to the outside world, and make corresponding measures to protect the environment and low-carbon life advocated at present, so as to be people-oriented, healthy and comfortable.

#### 1. Introduction

In the process of industrialization era, pollution caused by industrialization and its by-products is becoming more and more serious. Therefore, in today's society, completing the renewable and sustainable development of the environment is the top priority. In various industries, researchers have put their eyes on green environmental protection. With the issuance and implementation of national policies, the concept of green design has penetrated into the design industry, and the new green and environment-friendly technologies and new products needed in interior design have also been put into use, so that every designer can use the concept of green design to carry out interior design. In daily life, daily life accounts for a large part. Many people attach great importance to living room. Interior design plays a very important role in it, meeting people's psychological and physiological needs. It is an important milestone in people's design history. However, the original design was built on the basis of high energy consumption and high capital. It consumes a lot of environment, manpower and material resources. The consumption of environment is obvious to all. According to past environmental statistics, indoor design accounts for a large proportion of the annual environmental pollution, and in the design implementation process, the production, processing and transportation of raw materials will produce high pollution, which will have adverse effects on the environment. At present, the environmental pollution caused by indoor design has reached a level that cannot be ignored. It is no longer a problem that can be solved with the development of technology. It has shown that various factors in indoor environmental design are unsustainable and harmful. Under the current premise, doctors should be aware of the importance of green design concept. Only by using this concept in design can the problem be fundamentally solved. Therefore, it is very important to deeply discuss this concept [1].

Table 1 Comparison between green design concept and traditional design concept

Comparative factor	Green design	Traditional design
Design basis	Environmental benefits	Resource efficiency
Purpose of design	Environmental and Human Needs	Human needs

## 2. The Concept of Green Design

Green design is a very big concept in a broad sense. The meaning, ecological impact, environmental impact and consciousness impression derived from it are all a specific classification. They are all aimed at explaining a design concept that can be achieved in design and life, causing

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minimal pollution to the environment and even being beneficial to the environment. They can often be seen in various occasions. From a small scale, green design refers to the most environmentally friendly design concept in the definition and design of industrial products. Whether the initial design of products or the production, packaging, transportation, etc. put into production lines, in each link, the environmental protection awareness of personnel at all levels should be fully improved to establish relevant concepts for the public. Indeed, for individuals, "green concept" is a concept full of Abstract. meanings. I believe everyone has a different understanding of it. For our interior design profession, we should have our own unique cognitive understanding. We need to have a deeper and wider level of cognition and have a new understanding of this concept. Nowadays, "green" not only has a definition of life, but also has a very wide range of coverage. Through the extension of "green" in spatial structure design, the extension depends entirely on the designer's own design concept and on the external environment. Human beings and nature are inseparable. Everyone cannot exist independently from the external environment. However, human beings are social. In the environment in which they live, they are restricted by social and other prerequisites. Today, when material life is satisfied, more and more people are pursuing spiritual life and people's aesthetic ability is increasing day by day [2]. At this time, the demand for interior environment design has been greatly increased, and a large number of talents in design field have poured into this industry. Green design has been vigorously implemented in various countries. In the next few years, this concept will cover more and more families and will be closely related to everyone. In developed countries such as Europe and the United States, after the design is completed, they must pass the environmental impact examination and have strict requirements on the raw materials used in the design process, the waste and garbage emissions generated, the total amount of power consumption resources, the use and treatment of materials, etc. In the subsequent use stage, relevant departments must also conduct further follow-up investigations to ensure the lowest pollution. Thus, it can be seen how great the potential of "green design" is [3].

## 3. Basic Requirements

With the prevalence of relevant measures and the spread of ideas, the concept of green design has been widely recognized. At the same time, many corresponding standards have been produced to judge the design [4]. In the use and transfer of resources, the concept of sustainable development must be strictly observed, so as to achieve energy conservation and emission reduction, reduce the substantial consumption of manpower and material resources, reduce the one-time use of resources, strive to select those recyclable raw materials when selecting materials, carry out rational analysis on the needs of users, fully and reasonably meet the needs of users under the premise of using green materials, and bring the best experience to users [5].

However, in some contemporary interior designs, some designers make great use of artificial materials in the decoration process in order to make users satisfied or achieve the design effect they want, reduce the budget, and most of the artificial materials are made through chemical heavy industry. Of course, there are also a lot of toxins harmful to human body. Some chemical materials not only cause harm to the environment, affect air pollution, but also cause adverse effects on users' body and mind, thus causing adverse reactions to users. As a designer, it is true that design beauty and budget are important, but in a fast-growing society, for the sake of others, more consideration should be given to the sustainable development of the environment, instead of focusing firmly on the beauty and ugliness of the outside world without paying attention to humanistic care.

## 4. Approaches to Implementation

At the beginning of the design, the user's needs should be analyzed rationally, and the materials should be selected rationally according to the user's needs. If a large amount of synthetic materials are used, it is bound to cause unimaginable harm to people, and must start from the root of the raw materials. In terms of manpower and material resources, materials should be drawn nearby to reduce the expenditure on logistics. Harmlessness must be taken as the criterion. Green and

pollution-free materials should be selected as much as possible in the selection of decoration materials, and must be strictly in accordance with relevant national laws and regulations. Does this material not only have good use effect, but also the raw materials are generally natural materials, which will not cause harm to human body. In the selection of appliances such as daily life, you can purchase those appliances with low power consumption and low energy consumption, so as to reduce expenses in the future use process and reduce harmful factors in all aspects to the lowest state [6]. As for the adjustment of space creation, green interior design is not only a simple environmental layout, but also needs to be considered from the perspective of customers' use, considering how to create infinite value in limited environment combined with its own factors. However, unreasonable design space will obviously cause great inconvenience to people's life. The idea of green design also starts from space and strives to reasonably arrange limited space to meet people's needs and increase the reasonable use efficiency of every inch of space.

However, rationalization and recycling should also be paid attention to in the use of design materials. As we all know, in daily life, any material will face an aging problem with the increase of time and times of use. At this time, it is necessary to consider whether discarding the aging material will cause certain pollution to the environment. Therefore, in the early stage of design, the corresponding problems should be considered to reduce the expenditure of raw materials, recycle the used materials, properly process the raw materials, and so on, so as to reduce the expenditure and pollution to a minimum and ensure the sustainable development and reuse of the environment [7].

## 5. Conclusion

Advocating nature is an idea that designers must understand and advocating scientific development concept is an idea that everyone must follow. It is a very unwise act to combine human beings with nature and human beings with society closely, strongly advocate economical methods, and strictly put an end to extravagance and waste in interior decoration design in order to achieve results [8]. For any country, resources cannot be arbitrarily developed and excessive collection of domestic resources cannot be used to exchange for temporary progress and prosperity. This is a very unwise act that will cause irreversible harm to the environment, society and so on over time. On the premise of not affecting nature, the concept of green design creates a non-hazardous mode to improve people's living standards and achieve rational utilization. In the concrete implementation process, we should vigorously increase the use of the most energy control, indoor ventilation, light source design, natural plants and water resources, reasonably control the indoor design environment, and strive to create a most harmonious atmosphere! At present, we must have a clear understanding. In our country, the research on "green design" is at the stage of development, and the technology used in it is not perfect. However, today, we must introduce this idea into the design of daily life, continuously discuss and think about the problems, deepen our understanding, expand its connotation, and continuously promote the material use in the design industry from consumption to natural and sustainable development. Make more contributions to the happiness of society and people [9].

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