

The concept of sustainable design and its impact on the quality of the internal environment of interior design

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Research Summary:

The problem of air quality of the internal environment and related health problems related to the internal climate of buildings has attracted the attention of researchers in many countries of the world , However, the root of this problem extends since the end of World War II and the beginning of interest in energy conservation, where most of the concerns directed to the provision of energy consumption in buildings, And this was taken into account in all its designs, which turned it into closed and semi-enclosed areas with insulating materials, With the widespread use of industrial raw materials with harmful emissions to the environment and health of the individual.

That the problem of pollution is not limited to the air of the external environment, but also include the atmosphere of the internal environment, And the problem became important after the presence of the phenomenon of sick buildings, Which the WHO experts describe as a range of health symptoms that cause symptoms.

Hence the urgent need for sustainable design, which establishes an internal environment that meets the requirements of comfort and safety, as a strategy to minimize the pollution of buildings And the increase to the highest level in the efficiency of positive exchange between construction and the natural environment around it, Now that sustainable designs are available at all aesthetic and functional levels, awareness of the importance of sustainable design and its positive impact on human health should be recognized, a man who works to show the aesthetics and functionality of designs and materials used sustainable, although the designs are very expensive at the beginning, But it is recyclable and remains for future generations and does not harm the environment, Hence the problem of research in presenting the determinants of sustainable interior design and its impact on the quality of the internal environment of interior design and furniture.

key words:

Sustainable - Sustainable Design - Sick Building Syndrome (SBS- internal environment.

Research problem:

The problem of research is summarized in the following question:

In the light of the energy crisis, which has become a major economic burden on communities and individuals, and under the exploitation of natural resources, and the threat of the

environment harmful pollutants and toxic waste, How can sustainability and sustainable design concepts be applied to the quality of the internal environment in interior design and furniture?

Search Goal:

Explain one of the global trends in modern and future global environmental design and interior design is sustainable in an attempt to illustrate how to apply this design thought with an explanation of the impact on the quality of the internal environment of interior design and furniture and its impact on the health of the individual.

Research hypotheses :

The research assumes that the interest and commitment to sustainable design and the application of its principles and standards in terms of the use of resources and materials with a focus on the use of natural and sustainable raw materials that have no harmful emissions help to achieve the quality of the internal environment of interior design and improve indoor air quality

search limits: The research focuses on clarifying the concept of sustainable design and clarifying its impact on the quality of the internal environment of the internal design of the buildings to preserve the symptoms of the syndrome of diseased buildings and explaining the impact of the use of sustainable raw materials on the quality of the internal environment.

Sustainable design is:

The philosophy of design seeks to improve the quality of the built environment to the maximum extent possible and minimize damage to the natural environment.



Figure (1) shows the use of natural floor linoleum in public places, indicating the strength of the resistance and corrosion with different colors and effects, and the possibility of the work of different designs is a material of high durability and fire resistance and flame retardant, antibacterial, and available more than 100 colors.



Figure (2) shows the use of synthetic carpets made of natural fibers from the sisal plant to cover floors in public places

Such as reception and administrative offices, which indicates the strength of the resistance and resistance to the bar and corrosion with its different colors and effects, and the possibility of design.



Figure (3) shows the use of Natural Wall Covering in wall cladding with different designs, touches and colors.



Figure (4) shows different samples in the colors and texture of the natural wallpaper.

Results:

- The results of recent studies by the US Environmental Protection Agency (EPA) have shown that the concentration levels of most indoor pollutants are often about two to five times higher than their levels of concentration in the outside air.
- The main sources of indoor air pollution are chemicals that are chemically treated with highly toxic substances, carpet and carpet floors, toxic PVC, and industrial paints and

adhesives containing toxic fumes that adversely affect the skin and respiratory tract of humans.

- The use of raw materials and manufactured from plant fibers safe, and have no harmful emissions to the environment, it works to have a clean indoor air, which can be recycled without any adverse impact on the environment.
- Sustainable interior design requires responsiveness and compatibility with the environment, thus achieving the quality of the internal environment of interior design.

Recommendations:

- To create the appropriate environment to enable members of the community to benefit from internal design and sustainable furniture and facilitate the establishment of networks and links to encourage exchanges and interactions between the actors in the field of interior design in order to spread awareness of sustainable development.
- Recommending the importance of specialized scientific studies in the field of quality of the internal environment and raw materials, which are spread indiscriminately in the local markets in terms of their health and environmental in an attempt to avoid the harmful effects resulting therefrom.

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