# The role of sustainable interior design in treating sick residential building syndrome

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#### **Abstract:**

Housing is one of the essential human needs. Pollution of environmental elements such as air can lead to many health problems. For example: pollutants in the indoor air in the home can cause various disease phenomena, one of which is "sick building syndrome". This research discusses sick buildings, and it is that 70% of its users feel uncomfortable and sick, which is reflected in their productivity and activities. The theoretical side dealt with the concept of environment, environmentally diseased buildings, symptoms of building disease syndrome, and sustainability in interior design by addressing environmentally friendly materials and their characteristics, and here appeared the urgent need for sustainable interior design, which establishes an internal environment model that meets the requirements of comfort, and increases the positive exchange between the building and the environment. They are sustainable in use that do not harm the environment and are recyclable.

# Research problem:

Loss of an integrated environmental vision for sustainable interior design based on employing environmentally friendly materials to reduce harmful pollutants in the indoor environment. Research goal:

Reaching an integrated environmental vision that depends on monitoring and employing environmentally friendly materials with internal design elements to achieve the quality of the internal environment.

#### research importance:

Highlighting the importance of positive sustainable interior design to treat the phenomenon of sick residential buildings syndrome and highlighting the use of environmentally compatible materials that are compatible with the spirit of the age in the field of interior design.

#### **Research hypotheses:**

Activating the standards of sustainable interior design, especially the employment of sustainable materials, leading to an integrated environmental design vision that limits the negative effects on the internal and external environment.

#### **Research Methodology:**

The research follows the inductive approach.

#### key words:

Environment - Environmentally Sick Building Syndrome - Environmentally Compatible Buildings - Sustainability

#### An introduction: -

A person spends most of his day inside the dwelling, and the indoor air has become vulnerable to pollution, which causes pathological symptoms as in the "sick building syndrome". This syndrome causes severe headaches and stress for the patient as well as has clear negative effects

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on physical and psychological health and leads to a decline in productivity at work. The wide technological development in various fields of life and the use of modern technological materials led to the development of form and function, but this came in many times without taking into account the standard criteria for this material and the extent of radiation of these materials or their effect on the internal environment of the human being.

Studies of the US Environmental Protection Agency have shown that the percentage of indoor environmental pollutants concentration is about two to five times higher than the levels of their concentration in outdoor air, under normal conditions. But in the case of some indoor activities such as a maintenance measure using chemicals, the ratio doubles to A hundred times on the outside

The concept of the environment: It is a system that includes all the natural and life elements that exist around the globe, on its surface and in its interior, air and its various gaseous components, energy and its sources of rainwater, rivers, seas and oceans, the surface of the soil and what lives on and within it of plants and animals, and man with his different cultures and his social relations and the importance of interaction between those Cultures and relationships, all these elements combined are components of the environmental system in general, from which we can conclude the following: The environment is the framework in which a person lives. The environment includes the physical framework that represents the natural basis for all beings, including humans. The environment includes the social framework that represents individuals, groups and societies. The environment includes the technological framework and what man has invented and adapted, using modern technology in order to adapt to the environment

Sick Building Syndrome: The phenomenon of sick building syndrome was recognized in the seventies of the last century with the beginning of the widespread use of refrigeration, industrial heating and electrical appliances. The term sick building syndrome is used when a group of common symptoms appears on a number of people present inside a certain building or in a part of the building and these symptoms disappear in the event of leaving the building and may not disappear as complications may reach a disease called Building Related Illness where the symptoms are permanent. But it is getting better .

Sick Building Syndrome patient may suffer from some or all of these symptoms (headache - dizziness and dizziness - difficulty concentrating - irritation of the nose, throat and eyes - nausea - general fatigue and fatigue - skin rash - sensitivity to smells - distress and discomfort).

The most important environmentally compatible materials used in interior design inside residential buildings:

Technology has greatly contributed to the development of life in general and human life in particular, and it has worked on this through several axes, whether in digital or industrial technology or raw materials, so it has worked to adapt and employ it in a way that suits the environment and people, and examples of these materials are:

"Natural Linoleum"

"Bamboo "

"Corian Countertops"







# During the research, these results were achieved:

- Sustainable interior design has become a cure-all for sick residential building syndrome.
- The presence of environmentally friendly developed natural materials and their use in interior design.
- The use of sustainable interior design helps to create an administration based on the efficient use of environmental resources in a sustainable manner aimed at reducing the negative impacts on the environment.

#### **Recommendations:**

The need to support and develop technologies for sustainable interior design based on the reuse of previously used natural materials.

Awareness of the importance of sustainable interior design in environmentally satisfactory buildings and its positive impact on humans to obtain a design that achieves continuous efficiency

Designers must embrace a sustainable interior design concept.

We recommend that designers use environmentally friendly materials to avoid the phenomenon of sick residential building syndrome.

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