## Interior design elements and its impact on thermal modification Dr. Shahenda Salah Abd El-Aziz Turk

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## **Summary:**

Take a search, Interior design elements and its impact on thermal modification, this paper introduces to us the concept of Re-Adapt as a tool of hope that may lead us to a sustainable future. And it reviews the importance of looking to nature to find a path for a sustainable future which is the main idea that bio mimicry inviting us to embrace. Also illustrates what is meant by bio mimicry and its different descriptions and definitions, and the difference between it and the other terms that share the same idea. By discussing the idea of using thermal simulation by using interior design elements.

The problem of the research is to study the elements of interior design and their impact on thermal modification, and to elicit how to achieve compatibility and suitable with the environment. Hence this research paper. The research problem is limited to the following points:

The designer's lack of interest in the environmental dimension and the importance of preserving energy and natural resources when creating housing designs.

Not using clean, renewable natural energy. This results in environmental and health risks and problems due to the emission of harmful gases as a result of global warming, buildings become the enemy of the environment instead of being friendly to it.

Ignoring the role of the designer in how to harmonize between interior design and environmental localization in residential spaces.

Thermal mass perform the same function performed by the solar batteries in non-self-heating system (solar electricity system active solar system) both stores solar energy for re-use when needed. Thermal mass incorporated into domestic vacuum in several forms:

- 1-Internal floors covered with finishing material that the capability of storing solar energy (such as cement brick wood processing) flooring.
- 2- The Trombe walls or walls of a water pipeline, Thermal mass elements, which include floors and walls is one of the key elements in the solar house of self-absorption and heat storage materials.

## **Keywords:**

Re-Adapt, thermal mass, sustainable, Solar Radiant Floor heating, Trombe wall.

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