

Applying Light Physical Characteristics as One of the Visual Phenomena in Sustainable Interior Architecture

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Abstract:

Light, with all its properties, is the main source of visual life and an important driving element within the system of life in general. It is an enchanting world that addresses the mind, the eye and the conscience. It is the music of the eyes, and a true translation of the psychological state of human beings, contributing to the formation of bodies and creating the right atmosphere for their manifestation.

Color is nothing but a visual result of light, and there have been several attempts to study and link them throughout history, as chaos dominated the science of color until "Newton" announced his new theory in 1670, which states that "colors exist in white light itself, and what distinguishes them from some of it is its fractility within the prism."

Research problem:

- The use of industrial lighting mainly despite the economic burden it carries and the increase in thermal loads on the building, which negatively affects the surrounding environment in terms of harmful emissions.
- The lack of use of colors in the interior architecture in a manner consistent with the natural environment in which it is located and the type of facility.

Research goal:

Benefiting from sustainable design standards in constructing an environment-friendly building using sustainable natural lighting methods - solar energy - as a clean, permanent source of energy.

Flexibility to use lighting units, reconfigure them, and change their color.

research importance:

Develop the interior designer's knowledge of the importance of light, its physical properties and its relationship to color in interior design work.

search limits:

Studying the physical properties of light and their role in changing the visual appearance of interior design works.

Research Methodology:

A descriptive-analytical approach that presents the use of the properties of light in examples of interior design work.

Keywords:

Light Physical Characteristics, color, interior design, saving energy