مفهوم التصميم البيئى وأثره على تصميم المظلات المعدنية كأحد نظم الإنشاء المعدنى الخفيف

The Conceptual Environmental design and its Impact on the Umberellas metal Design as one methodolgy of Light Metal Construction

م.د/ هانى فوزى أبو العزم مدرس بقسم التعليم الصناعى كلية التربية - جامعة حلوان

Research Summary

The environmental design process aims to create an integrated design system that includes the integration of a set of standards in the design of products. These criteria include "functional, structural, economic and aesthetic criteria" as well as environmental standards. The present study examined the concept and principles of environmental design in order to develop the basic principles and standards The type of design and methods used in the design of metal umbrellas as one of the systems of light metal construction The research included three main axes .

- 1- the concept and principles of environmental design.
- 2- Metal umbrellas and light metal construction systems.
- 3 An analytical study of the methods of employing environmental design standards in selected models of metal umbrellas.

The research reached a number of results, the most important of which are:

1. The principles and standards of environmental design conform to the structural and construction systems of light metal construction systems, where these systems achieve flexibility and adaptability to diverse use environments.

The concept of environmental design includes the achievement of functional and aesthetic values consistent with the economics and efficiency of the construction, as well as the achievement of environmental standards in the design of metal umbrellas as one of the light metal construction systems.

DOI: 10.12816/0046523