

## Accepted Manuscript

Title: A BIOCLIMATIC OUTDOOR DESIGN TOOL IN URBAN OPEN SPACE DESIGN

Authors: Marianna Tsitoura, Marina Michailidou, Theocharis Tsoutsos



PII: S0378-7788(17)30134-2  
DOI: <http://dx.doi.org/doi:10.1016/j.enbuild.2017.07.079>  
Reference: ENB 7819

To appear in: *ENB*

Received date: 11-1-2017  
Revised date: 26-7-2017  
Accepted date: 27-7-2017

Please cite this article as: Marianna Tsitoura, Marina Michailidou, Theocharis Tsoutsos, A BIOCLIMATIC OUTDOOR DESIGN TOOL IN URBAN OPEN SPACE DESIGN, Energy and Buildings <http://dx.doi.org/10.1016/j.enbuild.2017.07.079>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**A BIOCLIMATIC OUTDOOR DESIGN TOOL IN URBAN OPEN SPACE DESIGN****Marianna Tsitoura, Marina Michailidou, Theocharis Tsoutsos**

\* Technical University of Crete, School of Environmental Engineering, Laboratory of Sustainable and Renewable Energy Systems

**ABSTRACT**

During the last decades, after indoor environment has been extensively analysed, interest has been increased, especially in the outdoor environment and the way it affects both the indoor environment and the overall quality of life in the cities. The scope of this study is to introduce a new approach to urban open space design by following a different design process and setting a new palette of design tools. This study provides a complete methodological tool which allows a simple, quick and easy area analysis that takes into consideration the most crucial microclimatic parameters and can provide the necessary information for the designer on how to create “bioclimatic” outdoor urban spaces for the summer season in Mediterranean climates. The tool provides the designer with comparable information on certain bioclimatic indexes that will assist him to make his design more “bioclimatic” and take the necessary decisions on the basic issues concerning the new area. The above methodology has been already applied to new projects in Greece and its results have already been noticed by the users.

*Keywords: bioclimatic design; open space; comfort*

Download English Version:

<https://daneshyari.com/en/article/4918993>

Download Persian Version:

<https://daneshyari.com/article/4918993>

[Daneshyari.com](https://daneshyari.com)