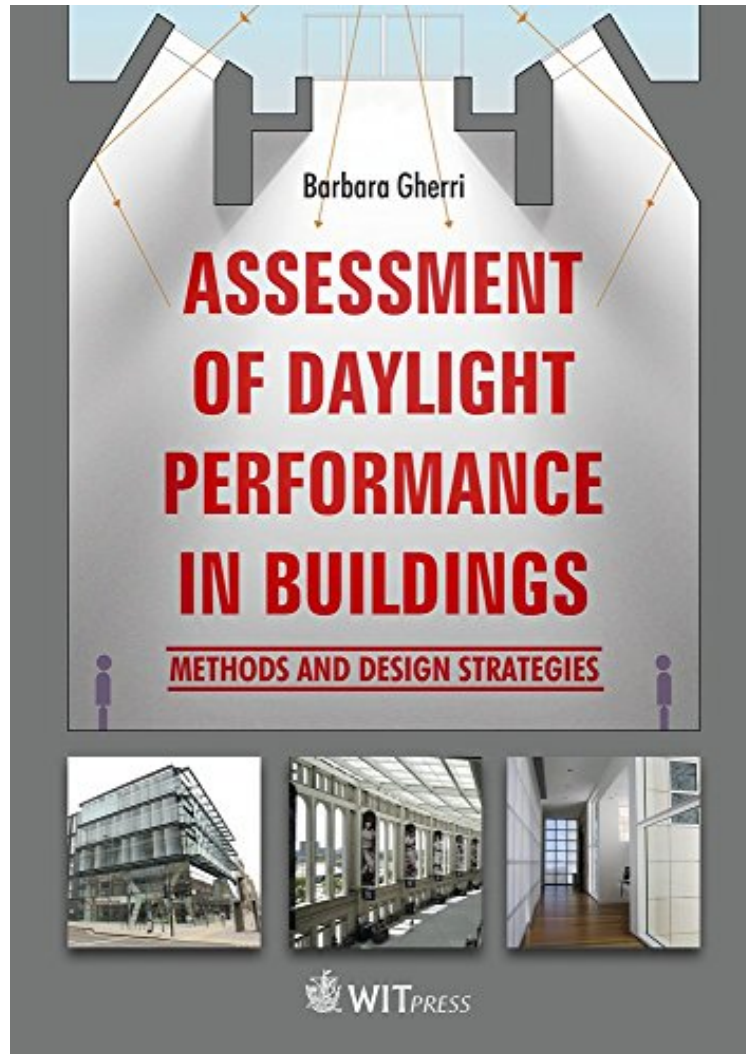


Assessment of Daylight Performance in Buildings: Methods and Design Strategies

B. Gherri

*ebooks / Download PDF / *ePub / DOC / audiobook*



DOWNLOAD



READ ONLINE

#4467999 in Books 2015-04-08Original language:English 10.00 x 7.25 x 1.00l, #File Name:
178466040X214 pages | File size: 63.Mb

B. Gherri : Assessment of Daylight Performance in Buildings: Methods and Design Strategies before purchasing it in order to gage whether or not it would be worth my time, and all praised Assessment of Daylight Performance in Buildings: Methods and Design Strategies:

Recently a renewed emphasis on the benefits of proper use of natural light has focused attention on the need to define a new paradigm, to properly assess the variability of the amount light that can be used not only to enhance the

presence of natural light as an instrument to outline indoor space expressively, but also to reduce the demand for electricity and thermal energy consumption in buildings. "Assessment of Daylight Performance in Buildings" deals with the many advantages associated with the use of natural light, comparing architectural experiences, technological devices and calculation methods. It explores the spatial qualities of built environments through the use of natural light, involving energy-saving strategies and visual comfort definition, although in current architectural practice, daylight is a greatly underexploited natural resource. A proper natural lighting system, tailored to the requirements of architectural form and customized to occupants functional desires is an essential support to modern climate control policies, as well as to energy-saving measures and to reducing thermal loads. An in-depth investigation of the different methods of assessment natural light reveals deficiencies and inaccuracies, showing the need to define a new calculation procedure that merges purely qualitative assessment with the new dynamic approach, involving users' preferences. Primarily intended for architects and designers, this book provides an introduction to the types of problems encountered and current available solutions to enhance and to convey the right dose of daylight inside the buildings, with a close attention to energy-saving strategies and to indoor visual comfort. Written for practitioners whose work is related to design and retrofit actions, the book will also be of interest to postgraduate students and lecturers dealing with indoor design optimization and energy-saving issues.

About the Author Barbara Gherri (M. Arch, PhD in Architecture) is a Post-doctoral Research Fellow in Building Technology, based at the Department of Civil Engineering, Environment, Land and Architecture, University of Parma, Italy. Her research aims at fostering the linkages between daylight usage, thanks to a qualitative and quantitative daylight appraisal and thanks to the integration of daylight devices into the building envelope, in order to exploit the benefits related to a proper use of natural light as a means to reduce energy demand and to improve indoor thermal and visual comfort. She has also studied bioclimatic design and other green-passive solutions meant to be merged into the building envelope to promote a self-sufficient passive design. Her academic and professional research focuses also on environmental certification methods. She has been involved in international conferences about daylighting and sustainable energy and has published numerous articles in scientific journals and books. She has joined several national research groups and international ones, as Low Carbon innovations in the framework of the Climate-KIC.