

Sun Wind And Light Architectural Design Strategies 3rd Edition

In this book we seek to approach the architecture-energy combination and its relationship to human comfort and the environment . There are chapters on thermal comfort, low energy architecture dealing with various criterion for comfort in different parts of the World. The book also seeks to understand how previous generations lived in harsh climates and without abundant sources of energy, yet managed to design and build appropriate dwellings providing both comfort and harmony with the environment. Other chapters deal with the bioclimatic concept in Vernacular Architecture; the major role which climate plays at different locations and how this can dictate the shape and form of the buildings and save energy; the importance of micro-climate and its various elements and usage; ventilation and its importance in buildings and the technology for modern architecture.

The time-saving resource every architect needs The Architect's Studio Companion is a robust, user-friendly resource that keeps important information at your fingertips throughout the design process. It includes guidelines for the design of structure, environmental systems, parking, accessibility, and more. This new sixth edition has been fully updated with the latest model building codes for the U.S. and Canada, extensive new information on heating and cooling systems for buildings, and new structural systems, all in a form that facilitates rapid preliminary design. More than just a reference, this book is a true companion that no practicing architect or student should be without. This book provides quick access to guidelines for systems that affect the form and spatial organization of buildings and allows this information to be incorporated into the earliest stages of building design. With it you can: Select, configure, and size structural systems Plan for building heating and cooling Incorporate passive systems and daylighting into your design Design for parking and meet code-related life-safety and accessibility requirements Relying on straightforward diagrams and clear written explanations, the designer can lay out the fundamental systems of a building in a matter of minutes—without getting hung up on complicated technical concepts. By introducing building systems into the early stages of design, the need for later revisions or redesign is reduced, and projects stay on time and on budget. The Architect's Studio Companion is the time-saving tool that helps you bring it all together from the beginning.

This collaborative volume by architectural historians and research engineers provides fresh insights into the early builders' art.

A 100-year visual history of the magazine, showcasing the work of top interior designers and architects, and the personal spaces of numerous celebrities. Architectural Digest at 100 celebrates the best from the pages of the international design authority. The editors have delved into the archives and culled years of rich material covering a range of subjects. Flanging freely between present and past, the book features the personal spaces of dozens of private celebrities like Barack and Michelle Obama, David Bowie, Truman Capote, David Hockney, Michael Kors, and Diana Vreeland, and includes the work of top designers and architects like Frank Gehry, David Hicks, India Mahdavi, Peter Marino, John Fowler, Renzo Mongiardino, Oscar Niemeyer, Axel Vervoordt, Frank Lloyd Wright, and Elsie de Wolfe. Also included are stunning images from the magazine's history by photographers such as Bill Cunningham, Horst P. Horst, Simon Upton, Francois Dischinger, Francois Halard, Julius Shulman, and Oberto Gilli. "The book is really a survey of how Americans have lived—and how American life has changed—over the past 100 years." ?Los Angeles Times "A Must-Have Book!" ?Interior Design Magazines "Written in the elevated quality that only the editors of Architectural Digest can master so well. AD at 100: A Century of Style is the world's newest guide to the best and brightest designs to inspire your next big home project." ?The Editorialist

Architectural Technology Up to the Scientific Revolution

Rules of Thumb for Preliminary Design

Using the Movements of the Sun, Wind and Rain to Bring Indoor Spaces and Sustainable Practices to Life

Architizer

Professional Cooking for Canadian Chefs

Energy Efficient Buildings

This video-enhanced book illustrates how the natural movements of sunlight, wind and rain can be used to animate indoor spaces. Based on decades of research confirming our continuing need for contact with nature, the book shows how the natural animation o

New buildings can be designed to be solar oriented, naturally heated and cooled, naturally lit and ventilated, and made with renewable, sustainable materials—no matter the location or climate. In this comprehensive overview of passive solar design, two of America's solar pioneers give homeowners, architects, designers, and builders the keys to successfully harnessing the sun and maximizing climate resources for heating, cooling, ventilation, and daylighting. Bainbridge and Haggard draw upon examples from their own experiences, as well as those of others, of more than three decades to offer both overarching principles as well as the details and formulas needed to successfully design a more comfortable, healthy, and secure place in which to live, laugh, dance, and be comfortable. Even if the power goes off, Passive Solar Architecture also discusses "green" and more-sustainable building materials and how to use them, and explores the historical roots of green design that have made possible buildings that produce more energy and other resources than they use.

The Green Studio Handbook remains an essential resource for design studios and professional practice. This extensive and user-friendly tool presents practical guidelines for the application of green strategies during the schematic design of buildings. Students and professionals can quickly get up to speed on system viability and sizing. Each of forty-three environmental strategies includes a brief description of principles and concepts, step-by-step guidance for integrating the strategy during the early stages of design, annotated tables and charts to assist with preliminary sizing, key issues to consider when implementing the strategy, and pointers to further resources. Ten new in-depth case studies illustrate diverse and successful green buildings integrated design projects and how the whole process comes together This third edition features updated tables and charts that will help to save energy, water, and material resources during the early stages of design. More than 500 sketches and full-color images illustrate how to successfully apply strategies. A glossary, a project index listing 105 buildings in 20 countries, updated tables and drawings, and I-P and SI units increase the usefulness of The Green Studio Handbook.

De Re Aedificatoria, by Leon Battista Alberti (1404-1472), was the first modern treatise on the theory and practice of architecture. Its importance for the subsequent history of architecture is incalculable, yet this is the first English translation based on the original, exceptionally eloquent Latin text on which Alberti's reputation as a theorist is founded.

Environmental Strategies for Schematic Design

Responsive Architecture

Daylighting in Architecture

Integral Sustainable Design

Mechanical and Electrical Equipment for Buildings

Interior Graphic Standards

Insident

This book offers practical and theoretical tools for more effective sustainable design solutions and for communicating sustainable design ideas to today's diverse stakeholders. It uses Integral Theory to make sense of the many competing ideas in this area and offers a powerful conceptual framework for sustainable designers through the four main perspectives of: Behaviours, Systems, Experiences and Cultures. It also uses human developmental theory to reform sustainable design across four levels of complexity present in society: the Traditional, Modern, Postmodern, and Integral waves. Profuse with illustrations and examples, the book offers many conceptual tools including: • Twelve Principles of Integral Sustainable Design • Sixteen Concepts of Sustainable Design • Six Perceptual Shifts for Ecological Design Thinking • Five Levels of Sustainable Design Aesthetics • Ten Injunctions for Designing Connections to Nature

CD-ROM contains: Samples of all AIA contract documents.

A unique and revolutionary text which explains the principles behind the IT Method (2.1), a manual design tool developed in Cambridge by the BRE. The IT Method is a unique way of estimating the combined energy usage of Lighting, heating, cooling and ventilation systems, to enable the designer to make comparisons between options at an early, strategic stage. In addition,Energy and Environment in Architecture the book deals with other environmental issues such as noise, thermal comfort and natural ventilation design. A variety of case studies provide a critique of real buildings and highlight good practice. These topics include thermal comfort, noise and natural ventilation.

Now in its third edition, this book provides the ideal and only reference to the physical basis of architectural design. Fully updated and expanded throughout, the book provides the data required for architects to design buildings that will maintain the users comfort in a variety of conditions, with minimal reliance on energy intensive methods like air conditioning. This is not a 'how to' book but answers the question why. It equips the reader with the tools to realize the full potential of the good intentions of sustainable, bioclimatic design. All sections have been revised and updated for this third edition including all the most relevant developments affecting heat, light and sound controls. The book responds to the need of understanding beyond 'rules of thumb'.

Student Edition

Sun, Wind, and Light: Architectural Design Strategies

Form, Space, and Order

Sun, Wind & Light

An Architectural Programming Primer

Problem Seeking

Sustainable Design Strategies Towards Net Zero Architecture

Essential site planning and design strategies, up-to-date with the latest sustainable development techniques Discover how to incorporate sound environmental considerations into traditional site design processes. Written by a licensed landscape architect with more than 20 years of professional experience, this authoritative guide combines established approaches to site planning with sustainable practices and increased environmental sensitivity. Fully revised and updated, Site Planning and Design Handbook, Second Edition discusses the latest standards and protocols-including LEED. The book features expanded coverage of green site design topics such as water conservation, energy efficiency, green building materials, site infrastructure, and brownfield restoration. This comprehensive resource addresses the challenges associated with site planning and design and lays the groundwork for success. Site Planning and Design Handbook, Second Edition explains how to: Integrate sustainability into site design Gather site data and perform site analysis Meet community standards and expectations Plan for pedestrians, traffic, parking, and open space Use grading techniques to minimize erosion and maximize site stability Implement low-impact stormwater management and sewage disposal methods Manage brownfield redevelopment Apply landscape ecology principles to site design Preserve historic landscapes and effectively utilize vegetation

Architecture:Environment How to design buildings that heat with the sun, cool with the wind, light with the sky, and move into the future using on-site renewable resources Developed for rapid use during schematic design, this book clarifies relationships between form and energy and gives designers tools for designing sustainable. It also: * Applies the latest passive energy and lighting design research * Organizes information by architectural elements at three scales: • building groups, individual buildings, and building parts • Brings design strategies to life with examples and practical design tools * Features: • 109 analysis techniques and design strategies * More than 750 illustrations, sizing graphs, and tables * Both inch-pound and metric units

Daylighting offers a general theory and introduction to the use of natural light in architecture. The fourth of Derek Phillips's lighting books draws on his experience to illustrate how best to bring natural light into building design. As sustainability becomes a core principal for designers, daylighting comes to the fore as an alternative to artificial, energy consuming, light. Here, Phillips makes a rational argument for considering daylight first, outlining the arguments in favour of a daylight approach, and goes on to show, through a series of beautifully illustrated case studies, how architects have created buildings in which natural light has been shown to play a major strategic role in the development of the design of a building.

The tropics are a way of life. Embracing outdoor surroundings as much as indoor possibilities, tropical houses have become a source of new impulses for architecture, interiors, and furniture design worldwide.

Bioclimatic Architecture in Warm Climates

Daylighting

The World's Best Architecture

Living Under the Sun

A Century of Style

Biophilic and Bioclimatic Architecture

Energy and Environment in Architecture

An updated guide to designing buildings that heat with the sun, cool with the wind, and light with the sky. This fully updated Third Edition covers principles of designing buildings that use the sun for heating, wind for cooling, and daylight for natural lighting. Using hundreds of illustrations, this book offers practical strategies that give the designer the tools they need to make energy efficient buildings. Hundreds of illustrations and practical strategies give the designer the tools they need to make energy efficient buildings. Organized to quickly guide the designer in making buildings respond to the sun, wind and light.

Biophilic and Bioclimatic Architecture is a guide to innovative architectural design for architects, engineers and other specialists who are working with biophilic and bioclimatic architectural concepts. Biophilic and Bioclimatic Architecture has three parts: • Part I focuses on the relationship between architecture and human needs and the creation process, demonstrating the meaning of architectural value in architectural hypothesis. • Part II opens the way towards a new understanding of biophilic architecture as a response to the negative actions of humans and the negative effects of using natural resources. • Part III shows the benefits of combining the effects of the climate with the notion of human comfort in bioclimatic architecture.

The essential guide to environmental control systems in building design For over 25 years Heating, Cooling, Lighting: Sustainable Design Strategies Towards Net Zero Architecture has provided architects and design professionals the knowledge and tools required to design a sustainable built environment at the schematic design stage.

This Fifth Edition offers cutting-edge research in the field of sustainable architecture and design and has been completely restructured based on net zero design strategies. Reflecting the latest developments in codes, standards, and rating systems for energy efficiency, Heating, Cooling, Lighting: Sustainable Design Strategies Towards Net Zero Architecture includes three new chapters: Retrofits: Best practices for efficient energy optimization in existing buildings Integrated Design: Strategies for synergizing passive and active design Design Tools: How to utilize the best tools to benchmark a building's sustainability and net zero potential Heating, Cooling, Lighting: Sustainable Design Strategies Towards Net Zero Architecture is a go-to resource for practicing professionals and students in the fields of environmental systems technology or design, environmental design systems, construction technology, and sustainability technology.

A superb visual reference to the principles of architecture Now including interactive CD-ROM! For more than thirty years, the beautifully illustrated Architecture: Form, Space, and Order has been the classic introduction to the basic vocabulary of architectural design. The updated Third Edition features expanded sections on circulation, light, views, and site context, along with new considerations of environmental factors, building codes, and contemporary examples of form, space, and order. This classic visual reference helps both students and practicing architects understand the basic vocabulary of architectural design by examining how form and space are ordered in the built environment.? Using his trademark meticulous drawing, Professor Ching shows the relationship between fundamental elements of architecture through the ages and across cultural boundaries. By looking at these seminal ideas, Architecture: Form, Space, and Order encourages the reader to look critically at the built environment and promotes a more evocative understanding of architecture. In addition to updates to content and many of the illustrations, this new edition includes a companion CD-ROM that brings the book's architectural concepts to life through three-dimensional models and animations created by Professor Ching.

The Architect's Studio Companion

Naturally-Animated Architecture

Architectural Digest at 100

Site Planning and Design Handbook, Second Edition

The Timeless Way of Building

Architecture - Comfort and Energy

The Architect's Handbook of Professional Practice

The classic guide for architects and clients-fully updated and revised. Architectural programming is a team effort that requires close cooperation between architects and their clients. Problem Seeking, Fourth Edition lays out a five-step procedure that teams can follow when programming any building or series of buildings, from a small house to a hospital complex. This simple yet comprehensive process encompasses the entire range of factors that influence the design of buildings.

This introductory volume to Alexander's other works, A Pattern of Language and The Oregon Experiment, explains concepts fundamental to his original approaches to the theory and application of architecture

Typically one third of the energy used in many buildings may be consumed by electric lighting. Good daylighting design can reduce electricity consumption for lighting and improve standards of visual comfort, health and amenity for the occupants.As the only comprehensive text on the subject written in the last decade, the book will be welcomed by all architects and building services engineers interested in good daylighting design. The book is based on the work of 25 experts from all parts of Europe who have collected, evaluated and developed the material under the auspices of the European Commission's Solar Energy and Energy Conservation R&D Programmes.

This is the best selling undergraduate food preparation textbook. It has a long standing reputation for being comprehensive, yet easy for students to understand and follow.

Design Methods for Architects

Tropical Interiors and Architecture

Architectural Design Strategies

Design Professional's Guide to Zero Net Energy Buildings

Architectural Design Strategies

Architecture and Lighting Design

Transformative Perspectives

Daylighting, Architecture and Health examines the relationship between natural light in buildings and human health, considering both psychological and physiological issues and bringing together a range of research in the field. As we are becoming increasingly conscious of global warming and pushing towards energy efficiency in buildings, the book examines the quest for building occupants. It gathers and reviews all the latest and pertinent medical and architectural research related to natural light, or lack thereof, and its effect on people. • Documents medical research findings which establish a link between light quality and health • Considers design strategies for increasing daylight in buildings • Develops understanding and awareness

Daylighting, Architecture and Health: Building Design Strategies is a timely and essential text for professional architects and all others concerned with the effects of daylighting on health, architecture and building design.

The latest spectacular celebration from Architizer of the most inspiring contemporary architecture from around the globe. The Architizer A+Awards represent 2021's best architecture and products, celebrated by a diverse group of influencers within and outside the architectural community. Entries are judged by more than 400 luminaries from ?elds as diverse as fa and technology, and voted on by the public, culminating in a collection of the world's finest buildings. Each year, winners are honored in this fully illustrated compendium, and on Architizer.com, the largest online architecture community on the planet. Featuring Select A-Award winners, this is the definitive guide to the year's best buildings and spaces.

In the Design Professional's Guide to Zero Net Energy Buildings, Charles Eley draws from over 40 years of his own experience, and interviews with other industry experts, to lay out the principles for achieving zero net energy (ZNE) buildings, which produce as much energy as they use over the course of a year. Eley emphasizes the importance of building energy use and energy use can be minimized through smart design and energy efficiency technologies; and presents practical information on how to incorporate renewable energy technologies to meet the lowered energy needs. The book shows the reader through examples and explanations that these solutions are viable and cost effective.

Using a qualitative rather than a quantitative approach, presents detailed information based on concepts, rules, guidelines, intuition, and experience for architects in the areas of heating, cooling, and lighting at the schematic design stage. The data explored supports a three-tiered approach--load avoidance, using natural energy sources, and mechanical equipment. An

passive heating and cooling, electric lighting, and HVAC. Case studies illustrate how certain buildings use techniques at all three tiers for heating, cooling, and lighting. An appendix lists some of the more appropriate computer programs available to the architect for analysis at the schematic design stage.

Heating, Cooling, Lighting

Building Codes Illustrated

Analytical Therapy for the Next Generation of Passive Sustainable Architecture

The Green Studio Handbook

Building Design Strategies

Introduction to Architectural Science

Passive Solar Architecture

"This fully updated Third Edition covers principles of designing buildings that use the sun for heating, wind for cooling, and daylight for natural lighting. Using hundreds of illustrations and companion CD-ROM, this book offers practical strategies that give the designer the tools they need to make energy efficient buildings"--

Tall buildings are not the only solution for achieving sustainability through increased density in cities but, given the scale of current population shifts, the vertical city is increasingly being seen as the most viable solution for many urban centers. However, the full implications of concentrating more people on smaller plots of land by building vertically - whether for work, residential or leisure functions - needs to be better researched and understood. It is generally accepted that we need to reduce the energy equation - in both operating and embodied terms - of every component and system in the building as an essential element in making it more sustainable.

Mechanical HVAC systems (Heating, Ventilation and Air-Conditioning) in tall office buildings typically account for 30-40 percent of overall building energy consumption. The increased efficiency (or possibly even elimination) of these mechanical systems - through the provision of natural ventilation - could thus be argued to be the most important single step we could make in making tall buildings more sustainable. This guide sets out recommendations for every phase of the planning, construction and operation of natural ventilation systems in these buildings, including local climatic factors that need to be taken into account, how to plan for seasonal variations in weather, and the risks of adopting different implementation strategies. All of the recommendations are based on analysis of the research findings from richly-illustrated international case studies. Tried and tested solutions to real-life problems make this an essential guide for anyone working on the design and operation of tall buildings anywhere in the world. This is the first technical guide from the Council on Tall Buildings and Urban Habitat's Tall Buildings & Sustainability Working Group looking in depth at a key element in the creation of tall buildings with a much-reduced environmental impact, while taking the industry closer to an appreciation of what constitutes a sustainable tall building, and what factors affect the sustainability threshold for tall.

Revised standard textbook and/or reference on the relationship between mechanical and electrical systems and the buildings they serve. This edition extends the philosophy of the seventh edition (1986), emphasizing the themes of energy conservation and the use of renewable energy sources while keeping readers informed of the major changes in equipment technology wrought by the microprocessor and the computer. A background of college-level mathematics and physics is assumed, and the volume is recognized as an important reference for the national architectural licensing examination. Annotation copyrighted by Book News, Inc., Portland, OR

This book is a collection of articles that have been published in the Special Issue "Responsive Architecture" of the MDPI Journal Buildings. The eleven articles within cover various areas of sensitive architecture, including the design of packaging structures reacting to supporting components; structural efficiency of bent columns in indigenous hotbed roof for responsive to buildings depending their resiliently transformed steel shell parts; creative design of building free shapes covered with transformed shells; artistic structural concepts of the architect and civil engineer; digitally designed airport terminal using wind analysis; rationalized shaping of sensitive curvilinear steel construction; interactive stories of responsive architecture; transformed shell roof constructions as the main determinant in the creative shaping of buildings without shapes that are sensitive to man-made and natural environments; thermally sensitive performances of a special shielding envelope on balconies; quantification of generality and adaptability of building layout using the SAGA method; and influence of initial conditions on the simulation of the transient temperature field inside a wall.

On the Art of Building in Ten Books

Heating, Cooling, Ventilation, Daylighting and More Using Natural Flows

Guide to Natural Ventilation in High Rise Office Buildings

Design Procedures for Passive Environmental Technologies

A Technical Design Guide

Daylighting, Architecture and Health

A European Reference Book

Addressing the problems involved in making buildings responsive to environmental forces, this study investigates such factors as climate, site and building components through each stage of the design process. Emphasis is placed on the integration of enviro

Sun, Wind, and Light: Architectural Design StrategiesJohn Wiley & Sons

THE BESTSELLING, FULLY ILLUSTRATED GUIDE TO THE 2018 INTERNATIONAL BUILDING CODE Uniquely marrying the graphic skills of bestselling author Francis D.K Ching with the code expertise of Steven Winkler, FAIA, the new sixth edition of Building Codes Illustrated is a clear, concise, and easy-to-use visual guide to the International Building Code (IBC) for 2018. Fully updated throughout, it highlights all of the changes to the code for quick reference and easy navigation. It pulls out the portions of the building code that are most relevant for the architect and provides an easy-to-understand interpretation in both words and illustrations. The first two chapters of Building Codes Illustrated: A Guide to Understanding the 2018 International Building Code, Sixth Edition give background and context regarding the development, organization, and use of the IBC. The following sections cover such information as: use and occupancy; building heights and areas; types of construction; fire-resistive construction; interior finishes; means of egress; accessibility; energy efficiency; roof assemblies; structural provisions; special inspections and tests; soils and foundations; building materials and systems; and more. A complete, user-friendly guide to code-compliant projects Highlights all the significant changes in the 2018 IBC Uses clear language and Frank Ching's distinctive illustrations to demystify the 2018 International Building Code (IBC) text Provides students and professionals with a fundamental understanding of IBC development, interpretation, and application Building Codes Illustrated: A Guide to Understanding the 2018 International Building Code gives students and professionals in architecture, interior design, construction, and engineering a user-friendly, easy-to-use guide to the fundamentals of the 2018 IBC.

This book discusses energy efficient buildings and the role they play in our efforts to address climate change, energy consumption and greenhouse gas emissions by considering buildings and the construction sector's unique position along a critical path to decarbonisation from a multi-perspective and holistic viewpoint. Topics covered in the book range from daylighting, building topology comparison, building envelope design, zero energy homes in hot arid regions, life-cycle considerations and energy efficiency analysis to managing energy demand through equipment selection. Each chapter addresses an important aspect of energy efficient building and serves as a vital building block towards constructing a timely and relevant body of knowledge in energy efficient buildings.

Architecture

The Basis of Sustainable Design

The Art and Structure of Large-scale Buildings

A Guide for Best Practices in Africa

A Guide to Understanding the 2018 International Building Code

This book provides a comprehensive, hands-on approach to bioclimatic building design in Africa. Bioclimatic design is at the core of urban sustainability, and is a critical issue in Africa, where "imported" building typologies are being used at an increasing pace, disregarding the local context and consequently causing damage to the environment, to the economy, and to the culture itself. This book provides a concise set of sustainable design guidelines to be applied in both new buildings and the refurbishment of old buildings, and integrates bioclimatic design strategies with other sustainability issues such as: cultural aspects, affordability, and urban planning. Chapters are fully illustrated with photographs and drawings and include best-practice examples and strategies making it accessible to engineers, architects, students and a broad range of professionals in the building industry. Encompasses all climatic regions in Africa; Integrates bioclimatic design strategies with other sustainability issues; Discusses new design to refurbishment, from urban to rural, including office buildings, residential, tourism, social housing and self building.

The new student edition of the definitive reference onarchitectural interiors Interior Graphic Standards, Student Edition is a carefully edited treatment of the authoritative Interior GraphicStandards Professional Edition. Designed and organized to givestudents the specific information they require, this is anessential reference for anyone studying architecturalinteriors. New topics include accessible design basics, computingtechnologies, fire-resistive construction, fire protection systems,security and communications systems, interior equipment,evidence-based design, and climate considerations. In addition, this second Student Edition offers more material onresidential design, is packed with more than 1,300 informativeillustrations, and includes the latest coverage for students tofind real help understanding the critical material they need for the core classes required by all curriculums. Additional revisions to this edition include: Updated coverage of sustainable design and material and ADAStandards for Accessible Design Companion website featuring online resources for students Expert advice and details for designing interior project typesincluding commercial, residential, healthcare, retail, hospitality,educational, performance, and museum spaces, as well as existingbuilding interiors Like Interior Graphic Standards Professional Edition, this student edition's Second Edition provides essentialspecification and detailing information for working inside thestructural shell, covering interior partitions and floor systems,updated lighting practices, furnishings, equipment, and wall,floor, and ceiling finishes.

This authoritative and multi-disciplinary book provides architects, lighting specialists, and anyone else working daylight into design, with all the tools needed to incorporate this most fundamental element of architecture. It includes: an overview of current practice of daylighting in architecture and urban planning a review of recent research on daylighting and what this means to the practitioner a global vision of architectural lighting which is linked to the climates of the world and which integrates view, sunlight, diffuse skylight and electric lighting up-to-date tools for design in practice delivery of information in a variety of ways for interdisciplinary readers: graphics, mathematics, text, photographs and in-depth illustrations a clear structure: eleven chapters covering different aspects of lighting, a set of worksheets giving step-by-step examples of calculations and design procedures for use in practice, and a collection of algorithms and equations for reference by specialists and software designers. This book should trigger creative thought. It recognizes that good lighting design needs both knowledge and imagination.