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Architectural Design with SketchUp Alexander C. Schreyer 2015-10-02 Go beyond the basics: making SketchUp work for you *Architectural Design with SketchUp, Second Edition*, is the leading guide to this incredibly useful tool for architects, interior designers, construction professionals, and makers. With easy to follow tutorials that first brush up on the basics of the program and then cover many advanced processes, this resource offers both informative text and full-color illustrations to clearly convey the techniques and features you need to excel. The updated second edition has a new chapter that explains how to make things with SketchUp, and covers 3D printing, design to fabrication, CNC milling, and laser cutting. Other chapters also now cover Building Information Modeling (BIM) and 3D web content generation. Additionally, the revised text offers insight into the latest products and plugin extensions, navigation methods, import/export options, and 3D model creation features to ensure you have an up to date understanding of how to make SketchUp help you meet your project goals. A leading 3D modeling application, SketchUp features documentation capabilities through photorealistic renderings and construction drawings. Because of its ease of use and ability to be enhanced with many plugin extensions for project-specific applications, SketchUp is considered the tool of choice for professionals in the architecture, interior design, construction, and fabrication fields. Access thoroughly updated information in an easy to understand writing style Increase your efficiency and accuracy when using SketchUp and refresh and supplement your understanding of SketchUp's basics Explore component-based modeling for assembly, scheduling, collaborative design, and modeling with a BIM approach Find the right plugin extensions and understand how to best work with them See how easy it is to generate presentation-ready renderings from your 3D models Learn how you can use 3D printing, CNC milling, and laser cutting to make things with SketchUp Use cookbook-style Ruby coding to create amazing 3D objects Supplement your knowledge with video tutorials, sample files, and Ruby scripts via a robust companion website *Architectural Design with SketchUp, Second Edition*, is an integral resource for both students and professionals working in the architecture, interior design, construction, and fabrication industries.

Bikeways in Massachusetts Gustave D. Olson 1975

Product Design for Manufacture and Assembly Geoffrey Boothroyd 2010-12-08
Hailed as a groundbreaking and important textbook upon its initial publication, the latest iteration of Product Design for Manufacture and Assembly does not rest on those laurels. In addition to the expected updating of data in all chapters, this third edition has been revised to provide a top-notch textbook for university-level courses in product

Project Independence: Denver, Colorado, Aug. 6-9, 1974 1974

Guide to Architecture Schools Association of Collegiate Schools of Architecture 2009

The Insider's Guide to the Colleges, 2013 Yale Daily News Staff 2012-07-03 A guide for prospective college students answers questions on such subjects as the academic strengths and weaknesses, the amount of student/faculty contact, and housing and food quality for more than three hundred schools in North America.

Diseases of Trees and Shrubs Wayne A. Sinclair 1987 *Diseases of Trees and Shrubs* is a comprehensive pictorial survey of the diseases of, as well as the environmental damage to, forest and shade trees and woody ornamental plants in the United States and Canada. An authoritative reference, it is also a reliable and handy diagnostic tool that will simplify the identification of specific plant diseases by focusing on signs and symptoms that can be seen with the unaided eye or with a hand lens. This long-needed book gives readers complete, up-to-date information in an easily understood and convenient way. Each of the 247 color plates faces a page of explanatory text covering the biology and ecology (including host and geographic ranges) of the disease-causing agents (pathogens), a list of key references (there are more than 2,250), and, in some cases, black-and-white illustrations of pathogens. Selected information about biological and cultural control is provided. Scientific terms other than Latin names of pathogens are used only when necessary, and a glossary of terms and a comprehensive index are included. The color plates contain more than 1,700 illustrations of the diseases and injuries that some 350 biological agents and environmental factors cause to more than 250 species of plants. The book also serves as a guide to hundreds of other diseases related to those shown. The authors have used three levels of organization for this book. At the first level, diseases caused by biological agents are separated from those caused by environmental stimuli. At the second level, most diseases are grouped according to the plant part affected: leaves, twigs, limbs, roots, trunks, or the entire plant. At the third level, diseases are presented according to the taxonomic relationships among the pathogens. For this major project, the authors examined and photographed diseases and environmental damage in the field, visiting more than 50 states and Canadian provinces. Their book reflects the most important developments in fungal biology and taxonomy, plant bacteriology, virology, and environmentally induced stress in plants. It summarizes information about newly

discovered diseases and provides up-to-date accounts of old ones. Diseases of Trees and Shrubs can be profitable reading for anyone whose technical training does not extend beyond general biology, yet will also be informative to advanced students and plant pathologists. It will be welcomed by agricultural and horticultural advisers, plant inspectors, arborists, nursery professionals, landscapers, foresters, and urban planners. Wayne A. Sinclair is a Professor of Plant Pathology, Howard H. Lyon is Biological Photographer (retired), Department of Plant Pathology, and Warren T. Johnson is Professor of Entomology, all at Cornell University.

Regenerative Design for Changemakers Abrah Dresdale 2020-09-15 Regenerative Design for Changemakers catalyzes readers to become active designers of change. Frameworks in social permaculture, racial justice, and systems thinking inspire readers to transform their personal lives and redesign organizations, institutions, and communities by harnessing the power of regenerative design.

The Big Dig Dan McNichol 2002 The first book ever written about Boston's Big Dig--the largest, most complex highway construction project ever embarked upon in U.S. history! This regional blockbuster reached #1 on the Boston Globe's bestseller list. Filled with dozens of remarkable photos and fascinating archival illustrations, it pulsates with details only an insider like Dan McNichol, former director of the project who was in at the conception, could provide. For example: During peak construction years, the Big Dig spends nearly \$110,000,000 a month. The project will place 3.8 million cubic yards of concrete, enough to build a sidewalk three feet wide and four inches thick from Boston to San Francisco...three times. Rats! Some city officials told the public that construction would dislodge millions of rats from deep down under the city. When The Big Dig is finally finished, Boston will have over 200 acres of new parks, its skyline will be transformed, and its infamous traffic nightmares will be a thing of the past.

VLSI Design Vikram Arkalgud Chandrasetty 2011-08-23 This book provides insight into the practical design of VLSI circuits. It is aimed at novice VLSI designers and other enthusiasts who would like to understand VLSI design flows. Coverage includes key concepts in CMOS digital design, design of DSP and communication blocks on FPGAs, ASIC front end and physical design, and analog and mixed signal design. The approach is designed to focus on practical implementation of key elements of the VLSI design process, in order to make the topic accessible to novices. The design concepts are demonstrated using software from Mathworks, Xilinx, Mentor Graphics, Synopsys and Cadence.

Handbook of Theory and Practice of Sustainable Development in Higher Education Walter Leal Filho 2016-12-01 This Handbook approaches sustainable development in higher education from an integrated perspective, addressing the dearth of publications on the subject. It offers a unique overview of what universities around the world are doing to implement sustainable development (i.e. via curriculum innovation, research, activities, or practical projects) and how their efforts relate to education for sustainable development at the university

level. The Handbook gathers a wealth of information, ideas, best practices and lessons learned in the context of executing concrete projects, and assesses methodological approaches to integrating the topic of sustainable development in university curricula. Lastly, it documents and disseminates the veritable treasure trove of practical experience currently available on sustainability in higher education.

The Insider's Guide to the Colleges, 2014 Yale Daily News Staff 2013-07-09 A guide for prospective college students answers questions on such subjects as the academic strengths and weaknesses, the amount of student/faculty contact, and housing and food quality for more than three hundred schools in North America.

Fundamentals of Residential Construction Alexander C. Schreyer 2011-03-10 The leading guide to professional home construction—now updated and revised! Fundamentals of Residential Construction, Third Edition features the most up-to-date explanations of today's residential construction systems. From foundation to roof and exterior finishes to interior details, this new edition thoroughly addresses the latest developments in materials and methods of house construction, including energy efficiency, framing, and roofing. Abundantly illustrated with more than 1,250 drawings and photographs, including new photorealistic illustrations that bring the text to life, this Third Edition provides authoritative coverage on wood light-frame construction, industrialized systems of construction, insulating concrete forms, light-gauge steel frame, panelized construction, and a new chapter on multifamily construction. Topics covered include: Plumbing Building codes Heating and cooling Financing Wiring Roofing Thermal insulation Environmental concerns Foundations Finish sitework Rough sitework Wood and light-gauge steel framing Engineered materials Exterior and interior finishes Organized in a logical, easy-to-follow format, Fundamentals of Residential Construction, Third Edition is the one-stop source for building professionals to gain a working knowledge of codes, management procedures, material, and all home building concerns.

The Insider's Guide to the Colleges, 2011 Yale Daily News Staff 2010-06-22 For more than thirty-five years, The Insider's Guide to the Colleges has been the favorite resource of high school students across the country because it is the only comprehensive college reference researched and written by students for students. In interviews with hundreds of peers on campuses from New York to Hawaii and Florida to Alaska, our writers have sought out the inside scoop at every school on everything from the nightlife and professors to the newest dorms and wildest student organizations. In addition to the in-depth profiles of college life, this 37th edition has been revised and updated to include: * Essential statistics for every school, from acceptance rates to the most popular majors * A "College Finder" to help students zero in on the perfect school * Insider's packing list detailing what every college student really needs to bring * FYI sections with student opinions and outrageous off-the-cuff advice. The Insider's Guide to the Colleges cuts through the piles of brochures to get to the things that matter most to students, and by staying on top of

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trends and attitudes it delivers the straight talk students and parents need to choose the school that's the best fit.

Research Methods for the Architectural Profession Ajla Aksamija 2021-03-04
Research Methods for the Architectural Profession introduces research as a systematic process, describes how to formulate research questions, provides an in-depth explanation of different research methods (qualitative, quantitative, and experimental), and explains how to select appropriate research methods and execute research studies. It describes the process of documentation, knowledge dissemination, and application of research results in architectural design and practice. Most importantly, it provides guidelines for integrating research into profession and uses extensive case-studies and practice-relevant examples to illustrate main concepts, procedures, and applications. Integrating research into practice is essential for developing new knowledge, solving design and technical problems, overcoming different types of challenges present in the contemporary profession, and improving the design outcomes. Innovation requires a much stronger correlation between research and design, and it is pertinent for the future of architectural practice that research becomes an integral part of architectural profession. This book provides a roadmap for successfully integrating research into architectural design and for establishing innovative practices, regardless of a firm's size. Written by an architecture professor with an extensive research and professional background—specifically focusing on integrating research into practice—and richly illustrated with over 150 color images, this reference will be useful for both students and practitioners.

Project Independence Blueprint United States. Federal Energy Administration
1974

Legal Aspects of Architecture, Engineering and the Construction Process Justin Sweet 2012-01-01
The primary focus of this text is to provide a bridge for students between the academic world and the real world. This bridge is built through an understanding of what is law, how law is created, how law affects almost every activity of human conduct, and how legal institutions operate. Intended mainly for architectural and engineering students, but increasingly for those in business schools and law schools, this text features a clear, concise, and jargon-free presentation. It probes beneath the surface of legal rules and uncovers why these rules developed as they did, outlines arguments for and against these rules, and examines how they work in practice. Updated with the most recent developments in the legal aspects of architectural, engineering, and the construction processes, this text is also a valuable reference for practitioners and has been cited in over twenty-five court decisions. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Project Independence Blue Print United States. Federal Energy Administration
1974

Wordless Diagrams Nigel Holmes 2005-04-11
The former graphics director of TIME

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magazine offers a unique look at everyday activities, depicting them through clear and precise step-by-step pictures that shed fascinating new light on common actions. 50,000 first printing.

Intelligent Decision Technologies 2018 Ireneusz Czarnowski 2018-05-30 This book gathers the proceedings of the KES-IDT-2018 conference, held in Gold Coast, Queensland, Australia, on June 20–22, 2018 The conference provided opportunities to present and discuss the latest research results, promoting knowledge transfer and the generation of new ideas in the field of intelligent decision-making. The range of topics explored is wide, and includes methods for decision-making, decision support, data analysis, modeling and many more in areas such as finance, economics, management, engineering and transportation. The book contains several sections devoted to specific topics, such as: · Decision-Making Theory for Economics · Advances in Knowledge-based Statistical Data Analysis · On Knowledge-Based Digital Ecosystems & Technologies for Smart and Intelligent Decision Support Systems · Soft Computing Models in Industrial and Management Engineering · Computational Media Computing and its Applications · Intelligent Decision-Making Technologies · Digital Architectures and Decision Management

Oer Andrew Wesolek 2018-10 For many of us, the drive to affect positive change--however vague or idiosyncratic our sense of this might be--has guided our work in higher education. We champion the pursuit of a college degree because few endeavors can match it in terms of advancing a person's economic mobility (Chetty, Friedman, Saez, Turner, and Yagan; 2017). Despite recent debates about the value of a college degree (Pew Research Center, 2017), the opportunities and financial stability awarded to those with college degrees remain apparent when they are compared to peers who have only graduated high school (Pew Research Center, 2014). And while more Americans have a college degree than ever before (Ryan and Bauman, 2016), access to a formal, post-secondary education continues to be elusive for some. Indeed, over the last ten years, analysts have projected that the cost of attending college would keep 2.4 million low-to-moderate income, college-qualified high school graduates from completing a college degree (Advisory Committee on Student Financial Assistance, 2006). During that same period, college students in the United States saw expenses related to tuition and fees increase by 63 percent, school housing costs (excluding board) increase by 51 percent, textbook prices increase by 88 percent (Bureau of Labor, 2016). Because few students can afford a college education by salary alone, 44.2 million Americans have sought financial aid via student loans. As a result, total student loan debt is now topping \$1.45 trillion in the United States (Board of Governors of the Federal Reserve System, 2017), and student loan delinquency rates are averaging 11.2 percent (Federal Reserve Bank of New York, 2017). The burden of a student's financial decisions extends beyond the mere individual: society will inevitably carry the weight of this debt for years to come.

Heating, Cooling, Lighting Norbert Lechner 1991-01-16 Using a qualitative rather than a quantitative approach, presents detailed information based on

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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. Among the topics covered are shading, thermal envelope, 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.

1999 European Wind Energy Conference E.L. Petersen 2014-01-02 The 1999 European Wind Energy Conference and Exhibition was organized to review progress, and present and discuss the wind energy business, technology and science for the future. The Proceedings contain a selection of over 300 papers from the conference. They represent a significant update to the understanding of this increasingly important field of energy generation and cover a full range of topics.

Statics and Strength of Materials for Architecture and Building Construction Barry S. Onouye 2013-10-03 For courses in Statics, Strength of Materials, and Structural Principles in Architecture, Construction, and Engineering Technology. *Statics and Strength of Materials for Architecture and Building Construction, Fourth Edition*, offers students an accessible, visually oriented introduction to structural theory that doesn't rely on calculus. Instead, illustrations and examples of building frameworks and components enable students to better visualize the connection between theoretical concepts and the experiential nature of real buildings and materials. This new edition includes fully worked examples in each chapter, a companion website with extra practice problems, and expanded treatment of load tracing.

Pocket Medicine Marc S Sabatine 2013-10-07 Prepared by residents and attending physicians at Massachusetts General Hospital, this pocket-sized looseleaf is one of the best-selling references for medical students, interns, and residents on the wards and candidates reviewing for internal medicine board exams. In bulleted lists, tables, and algorithms, *Pocket Medicine* provides key clinical information about common problems in internal medicine, cardiology, pulmonary medicine, gastroenterology, nephrology, hematology-oncology, infectious diseases, endocrinology, and rheumatology. This Fifth Edition is fully updated and includes a sixteen-page color insert with key and classic abnormal images. If you purchased a copy of Sabatine: *Pocket Medicine 5e*, ISBN 978-1-4511-8237-8, please make note of the following important correction on page 1-36: Oral anticoagulation (Chest 2012;141:e531S; EHJ 2012;33:2719; Circ 2013;127:1916) · All valvular AF as stroke risk very high · Nonvalv. AF: stroke risk ~4.5%/y; anticoag ® 68% ~ stroke; use a risk score to guide Rx: CHADS2: CHF (1 point), HTN (1), Age =75 y (1), DM (1), prior Stroke/TIA (2) CHA2DS2-VASc: adds 65–74 y (1) =75 y (2), vasc dis. [MI, Ao plaque, or PAD (1)]; ? (1) score ³2 ® anticoag; score 1 ® consider anticoag or ASA (? latter reasonable if risk factor age 65-74 y, vasc dis. or ?); antithrombotic Rx even if rhythm

control [SCORE CORRECTED] · Rx options: factor Xa or direct thrombin inhib (non-valv only; no monitoring required) or warfarin (INR 2-3; w/ UFH bridge if high risk of stroke); if Pt refuses anticoag, consider ASA + clopi or, even less effective, ASA alone (NEJM 2009;360:2066) Please make note of this correction in your copy of Sabatine: Pocket Medicine 5e immediately and contact LWW's Customer Service Department at 1.800.638.3030 or 1.301.223.2300 so that you may be issued a corrected page 1-36. You may also download a PDF of page 1-36 by clicking [HERE](#). All copies of Pocket Medicine, 5e with the ISBN: 978-1-4511-9378-7 include this correction.

Internet Guide for Maintenance Management Joel Levitt 1998 Guides maintenance professionals through the use of the Internet to solve maintenance problems, research maintenance issues, and find answers or additional resources. Chapters present such topics as search engines and supersites; government Internet sites; and newsgroups, forums, and chats. Annotat

A Guide to Teaching in the Active Learning Classroom Paul Baepler 2016-06-03 While Active Learning Classrooms, or ALCs, offer rich new environments for learning, they present many new challenges to faculty because, among other things, they eliminate the room's central focal point and disrupt the conventional seating plan to which faculty and students have become accustomed. The importance of learning how to use these classrooms well and to capitalize on their special features is paramount. The potential they represent can be realized only when they facilitate improved learning outcomes and engage students in the learning process in a manner different from traditional classrooms and lecture halls. This book provides an introduction to ALCs, briefly covering their history and then synthesizing the research on these spaces to provide faculty with empirically based, practical guidance on how to use these unfamiliar spaces effectively. Among the questions this book addresses are: • How can instructors mitigate the apparent lack of a central focal point in the space? • What types of learning activities work well in the ALCs and take advantage of the affordances of the room? • How can teachers address familiar classroom-management challenges in these unfamiliar spaces? • If assessment and rapid feedback are critical in active learning, how do they work in a room filled with circular tables and no central focus point? • How do instructors balance group learning with the needs of the larger class? • How can students be held accountable when many will necessarily have their backs facing the instructor? • How can instructors evaluate the effectiveness of their teaching in these spaces? This book is intended for faculty preparing to teach in or already working in this new classroom environment; for administrators planning to create ALCs or experimenting with provisionally designed rooms; and for faculty developers helping teachers transition to using these new spaces.

The Interior Architecture Theory Reader Gregory Marinic 2018-01-17 The Interior Architecture Theory Reader presents a global compilation that collectively and specifically defines interior architecture. Diverse views and comparative resources for interior architecture students, educators, scholars, and

practitioners are needed to develop a proper canon for this young discipline. As a theoretical survey of interior architecture, the book examines theory, history, and production to embrace a full range of interior identities in architecture, interior design, digital fabrication, and spatial installation. Authored by leading educators, theorists, and practitioners, fifty chapters refine and expand the discourse surrounding interior architecture.

Department of the Interior and Related Agencies Appropriations for 1994 United States. Congress. House. Committee on Appropriations. Subcommittee on Department of the Interior and Related Agencies 1993

Massachusetts Volunteer Monitors Guidebook to Quality Assurance Project Plans
Paul J. Godfrey 2001

The Buffalo Park System Buffalo (N.Y.). Park Commission 1881

European Symposium on Computer Aided Process Engineering - 11 R. Gani
2001-04-30 This book contains papers presented at the 11th Symposium of Computer Aided Process Engineering (ESCAPE-11), held in Kolding, Denmark, from May 27-30, 2001. The objective of ESCAPE-11 is to highlight the use of computers and information technology tools, that is, the traditional CAPE topics as well as the new CAPE topics of current and future interests. The main theme for ESCAPE-11 is process and tools integration with emphasis on hybrid processing, cleaner and efficient technologies (process integration), computer aided systems for modelling, design, synthesis, control (tools integration) and industrial case studies (application of integrated strategies). The papers are arranged in terms of the following themes: computer aided control/operations, computer aided manufacturing, process and tools integration, and new frontiers in CAPE. A total of 188 papers, consisting of 5 keynote and 183 contributed papers are included in this book.

The Insider's Guide to the Colleges, 2015 Yale Daily News Staff 2014-07-01 With this new edition, The Insider's Guide to the Colleges has been, for 41 years, the most relied-upon resource for high school students looking for honest reports on colleges straight from the college students themselves. Having interviewed hundreds of their peers on more than 330 campuses and by getting the inside scoop on everything from the nightlife and professors to the newest dorms and wildest student organizations, the reporters at the Yale Daily News have created the most candid college guide ever. In addition to the in-depth profiles, this edition has been updated to include: * Essential statistics for every school, from acceptance rates to popular majors * A "College Finder" to help students zero in on the perfect school * All-new FYI sections with student opinions and outrageous advice The Insider's Guide to the Colleges cuts through the glossy Web sites and brochures to uncover the things that matter most to students, and by staying on top of trends, it gives both students and their parents the straightforward information they need to choose the school that's right for them.

Introduction to Metadata Murtha Baca 2008

University of Massachusetts, Amherst Marla R. Miller 2013-04-09 The newest title in our Campus Guide series takes readers on an architectural tour of University of Massachusetts Amherst. As one of the nation's oldest public universities, and the largest in the Northeast, the University has a rich and storied history. Initially chartered as the Massachusetts Agricultural College, the school has grown from fifty farmers to close to 24,000 students of diverse backgrounds and academic interests. The University's campus has also expectedly experienced parallel growth. From a few barns on the Berkshire foothills, the University now sits atop nearly 1,500 acres. Five carefully considered tours put the architectural history of the campus into context.

Department of the Interior and Related Agencies Appropriations for 1994: Justification of the budget estimates: Office of the Secretary United States. Congress. House. Committee on Appropriations. Subcommittee on Department of the Interior and Related Agencies 1993

Integration + Innovation Caryn Brause 2021-01-25

The Designer's Field Guide to Collaboration Caryn Brause 2016-11-18 The Designer's Field Guide to Collaboration provides practitioners and students with the tools necessary to collaborate effectively with a wide variety of partners in an increasingly socially complex and technology-driven design environment. Beautifully illustrated with color images, the book draws on the expertise of top professionals in the allied fields of architecture, landscape architecture, engineering and construction management, and brings to bear research from diverse disciplines such as software development, organizational behavior, and outdoor leadership training. Chapters examine emerging and best practices for effective team building, structuring workflows, enhancing communication, managing conflict, and developing collective vision—all to ensure the highest standards of design excellence. Case studies detail and reflect on the collaborative processes used to create award-winning projects by Studio Gang, Perkins+Will, Tod Williams Billie Tsien Architects | Partners, Gensler, CDR Studio, Mahlum Architects, In.Site:Architecture, and Thornton Tomasetti's Core Studio. The book also provides pragmatic ideas and formal exercises for brainstorming productively, evaluating ideas, communicating effectively, and offering feedback. By emphasizing the productive influence and creative possibilities of collaboration within the changing landscape of architectural production, the book proposes how these practices can be taught in architecture school and expanded in practice. In a changing world that presents increasingly complex challenges, optimizing these collaborative skills will prove not only necessary, but crucial to the process of creating advanced architecture.

Sustainable Facades Ajla Aksamija 2013-03-27 Practical information on designing sustainable, energy-efficient building facades As energy and other natural resources are being depleted, it has become clear that technologies and

strategies that allow us to maintain our satisfaction with interior environments while consuming less of these resources are major objectives of contemporary facade design. Sustainable Facades focuses on the strategies and approaches for designing sustainable, high-performance building facades, and provides technical guidance for architects and designers. This timely and useful guide presents strategies and technical guidelines for designing environmentally sensitive, energy-efficient facades based on scientific principles. It provides climate-specific approaches for minimizing energy consumption, analyzes the thermal behavior of different facade systems and materials, and illustrates with case studies how these approaches have been implemented on architectural projects. It also discusses emerging facade technologies, materials, and systems. Topics covered in this unique and indispensable guide include: Climate-based design approaches for high-performance facades Characteristics of sustainable facades: energy efficiency, thermal behavior, and moisture resistance Designing for thermal comfort, lighting and glare control, and acoustic quality Emerging technologies in facade design, including smart materials, double-skin facades, and facades as energy generators Case studies on building orientation and facade design, tectonic sun exposure control, external shading elements, and more

Building Structures Illustrated Francis D. K. Ching 2014-03-04 A new edition of Francis D.K. Ching's illustrated guide to structural design Structures are an essential element of the building process, yet one of the most difficult concepts for architects to grasp. While structural engineers do the detailed consulting work for a project, architects should have enough knowledge of structural theory and analysis to design a building. Building Structures Illustrated takes a new approach to structural design, showing how structural systems of a building—such as an integrated assembly of elements with pattern, proportions, and scale—are related to the fundamental aspects of architectural design. The book features a one-stop guide to structural design in practice, a thorough treatment of structural design as part of the entire building process, and an overview of the historical development of architectural materials and structure. Illustrated throughout with Ching's signature line drawings, this new Second Edition is an ideal guide to structures for designers, builders, and students. Updated to include new information on building code compliance, additional learning resources, and a new glossary of terms Offers thorough coverage of formal and spatial composition, program fit, coordination with other building systems, code compliance, and much more Beautifully illustrated by the renowned Francis D.K. Ching Building Structures Illustrated, Second Edition is the ideal resource for students and professionals who want to make informed decisions on architectural design.