Leed Reference Guide 2014

Ideal for architects, engineers, or contractors seeking the LEED Building Design & Construction (BD&C) credential, the book is a clearly organized study guide that includes sample quizzes throughout at the end of each section. Authored by an expert who teaches seminars on LEED BD&C to professionals, this LEED exam prep book stands out from its competitors in its engaging and stimulating approach. Material includes include drawings, charts, and diagrams to help the reader visually understand the concepts.

Ongoing urbanization and ever-growing harmful environmental impacts from urban areas necessitate a sustainability transformation in cities. However, cities are also centers of wealth creation and consumption, which both drive environmental degradation. It is clear that cities need to re-establish themselves as low-energy/low-carbon systems, but the transformation is complex in many ways and time is running out. This Special Issue, “Energy Efficient Cities of Today and Tomorrow”, seeks to provide a more profound understanding of the future energy requirements of urban areas and low-energy and low-carbon cities. The published papers range from macro-level assessments of cities manifesting themselves as forerunners in their environmental work to micro-level studies of pro-environmental attitudes and their impacts on individual emissions, a carbon footprint impacts of sharing of goods and services.

This book addresses key issues across the field of sustainable urban planning, and provides a unique reference tool for planners, engineers, architects, public administrators, and other experts. The evolution of cities and communities is giving rise to pressing energy and environmental problems that demand concrete solutions. In this context, urban planning is inevitably a complex activity that requires a sound analytical interpretation of ongoing developments, multidisciplinary analysis of the available tools and technologies, appropriate political management, and the ability to monitor progress objectively in order to verify the effectiveness of the policies implemented. This book is exceptional in both the breadth of its coverage and its focus on the interactions between different elements. Individual sections focus on strategies and tools for green planning, energy efficiency and sustainability in city planning, sustainable mobility, rating systems, and the smart city approach to improving urban-scale sustainability. The authors draw on their extensive practical experience to provide operational content supplementing the theoretical and methodological elements covered in the text, and each section features informative case studies.

Prepare for the LEED Green Associate v4 exam with an expert who has been there – and passed! Guide to the LEED Green Associate V4 Exam is a comprehensive study guide for the LEED Green Associate v4 exam. Written by a LEED expert and consultant who actually passed the exam, this guide provides a first-hand account of preparation strategies that work. The book is designed to work with how people study, organized for quick navigation, with sample questions and flashcards throughout. The companion website offers additional study aids, including more sample test questions and flashcards. The book covers all topics and principles included on the exam, and provides all the information necessary to pass. Passing the LEED Green Associate v4 exam is the only way to get the Green Associate credential, so a complete, comprehensive study guide is essential. The Guide to the LEED Green Associate Exam has been updated specifically to align with the most current version of the exam. Topics include: The three tiers of the credentialing process Concepts and processes of sustainable design LEED design strategies and technologies How and what to study for the exam Beyond just providing information, this book offers the insight of someone who's been there, and can manage expectations and eliminate surprises. Motivating, engaging, and packed with expert advice, the Guide to the LEED Green Associate Exam helps eager professionals prepare for – and pass – the LEED Green Associate v4 exam.

Pass the LEED AP BD+C Exam, Get Your Building LEED Certified, Fight Global Warming, and Save Money! The USGBC released LEED v4 in GreenBuild International Conference and Expo in November, 2013. The GBCI started to include the new LEED v4 content for all LEED exams in June 2014. We have incorporated the new LEED v4 content in this book. LEED (Leadership in Energy and Environmental Design) is one of the most important trends in development and is revolutionizing the construction industry. It has gained tremendous momentum and has a profound impact on our environment. From this book, you will be able to: 1. Identify your weakness through practice questions 2. Learn to work well under the pressure of timed tests 3. Check your responses against the solutions 4. Understand the solutions for the difficult questions through the explanations 5. Fully understand the scope, difficulty level, and format of the LEED AP BD+C Exam 6. Learn how to pass the LEED AP BD+C Exam 7. Become familiar with the new version of LEED rating systems. There is NO official GBCI book on the LEED AP BD+C Exam. “LEED BD&C Mock Exam” fills in the blanks and demystifies LEED. The book includes 200 questions and simulates the real exam in every aspect, including scope, difficulty level, format, and number of questions in each LEED category. It includes questions, answers, and explanations. This book is small and easy to carry around. You can read it whenever you have spare minutes. It is an indispensable resource for ordinary people, developers, brokers, contractors, administrators, architects, landscape architects, engineers, interns, drafters, designers, and other design professionals. All our books are available at GreenExamEducation.com Check out FREE tips and info for all LEED Exams and ARE Exams at GeeForums.com, you can post jpeg files of your vignettes or your questions for other users' review and responses.

This open access book is based on work from the COST Action RESTORE - REthinking Sustainability TOwards a Regenerative Economy, and highlights how sustainability in buildings, facilities and urban governance is crucial for a future that is socially just, ecologically restorative, and economically viable, for Europe and the whole planet. In light of the search for fair solutions to the climate crisis, the authors outline the urgency for the built environment sector to implement adaptation and mitigation strategies, as well as a just transition. As shown in the chapters, this can be done by applying a broader framework that enriches places, people, ecology, culture, and climate, at the core of the design task - with a particular emphasis on the benefits towards health and resilient business practices. This book is one step on the way to a paradigm shift towards restorative sustainability for new and existing buildings. The authors want to promote forward thinking and multidisciplinary knowledge, leading to solutions that celebrate the richness of design creativity. In this vision, cities of the future will enhance users' experience, health and wellbeing inside and outside of buildings, while reconciling anthropic ecosystems and nature. A valuable resource for scientists and students in environmental sciences and architecture, as well as policy makers, practitioners and investors in urban and regional development.

The Construction Chart Book presents the most complete data available on all facets of the U.S. construction industry: economic, demographic, employment/income, education/training, and safety and health issues. The book presents this information in a series of 50 topics, each with a description of the subject matter and corresponding charts and graphs. The contents of The Construction Chart Book are relevant to owners, contractors, unions, workers, and other organizations affiliated with the construction industry, such as health providers and workers compensation insurance companies, as well as researchers, economists, trainers, safety and health professionals, and industry observers.

Sustainable Steel Buildings reviews steel and its potential as a sustainable building material and shows how steel can be used to deliver buildings and structures with a high level of sustainability. The book's main focus is on the advantages and disadvantages of steel and how those characteristics can be used under a range of international certification systems (DGNB, LEED, BREEAM, openhouse etc).

This volume introduces an innovative tool for the development of sustainable cities and the promotion of the quality of life of city inhabitants. It presents a decision-support system to orient

public administrations in identifying development scenarios for sustainable urban and territorial transformations. The authors have split the volume into five parts, which respectively describe the theoretical basis of the book, the policies in question and indicators that influence them, the decision-support system that connects indicators to policies, the case study of Ancona, Italy, and potential future directions for this work. This volume is based on transdisciplinary research completed in May 2016 that involved about 40 researchers at The University of Camerino, Italy and other European universities. With purchase of this book, readers will also have access to Electronic Supplementary Material that contains a database with groups of indicators of assessment of urban quality of life and a toolkit containing the data processing system and management information system used in the book's case study.

Proven Strategies for Getting a Project LEED® Certified Here is the ideal guide for architects, engineers, interior designers, project managers, facility managers, and building owners for understanding the project certification process for the Leadership for Energy and Environmental Design (LEED®) for New Construction and Major Renovations (LEED NC), LEED for Core & Shell (LEED CS), and LEED for Commercial Interiors (LEED CI) rating systems of the U.S. Green Building Council (USGBC®). Written by an expert who is the President of Design Management Services, a LEED consulting firm?Guidebook to the LEED Certification Process engages readers by outlining the steps, roles, and responsibilities of the team members in a straightforward, chronological manner that helps streamline the certification process. With the release of the LEED v3 rating systems and a new version of LEED-Online, the Guidebook to the LEED Certification Process helps project teams to streamline the project team efforts and outlines the role of the LEED consultant and project administrator. Written for LEED AP professionals and building owners that need guidance navigating a project through the process, this book outlines each step in the design and construction phases including programming and post-occupancy. Serving as a valuable resource for anyone seeking information on how to get a project LEED certified, Guidebook to the LEED Certification Process features: An overview of the integrative design process. Understanding the role of a LEED consultant. How to build a successful team for a project pursuing LEED certification. How to register a project with Green Building Certification Institute (GBCI). Common pitfalls to avoid during the LEED certification process. Checklists to use during design and construction to keep the team on track.

"Green Building Illustrated is a must-read for students and professionals in the building industry. The combination of incredibly expressive illustrations and accessible technical writing make concepts of green building on paper as intuitive as they would be if you toured a space with experts in sustainable building." —Rick Fedrizzi, President, CEO, and Founding Chair of the U.S. Green Building Council "The authors of Green Building Illustrated deliver clear and intelligent text, augmented by straightforward but compelling illustrations describing green building basics. This comprehensive book covers everything from the definition of green building, to details of high performance design, to sensible applications of renewable energy. This is a book with appeal for all architects and designers, because it addresses general principles such as holistic and integrated design, along with practical realities like affordability and energy codes. Green Building Illustrated describes a pathway for reaching Architecture 2030's carbon emission reduction targets for the built environment."—Ed Mazria, founder of Architecture 2030 "…a neophyte will have a very good overview of all the factors involved in green building. I see some excellent pedagogy at work!" — Jim Gunshinan, Editor, Home Energy Magazine Francis D.K. Ching brings his signature graphic style to the topic of sustainable design In the tradition of the classic Building Construction Illustrated, Francis D.K. Ching and Ian M. Shapiro offer a graphical presentation to the theory, practices, and complexities of sustainable design using an approach that proceeds methodically. From the outside to the inside of a building, they cover all aspects of sustainability, providing a framework and detailed strategies to design buildings that are substantively green. The book begins with an explanation of why we need to build green, the theories behind it and current rating systems before moving on to a comprehensive discussion of vital topics. These topics include site selection, passive design using building shape, water conservation, ventilation and air quality, heating and cooling, minimum-impact materials, and much more. Explains the fundamental issues of sustainable design and construction in a beautifully illustrated format Illustrated by legendary author, architect, and draftsman Francis D.K. Ching, with text by recognized engineer and researcher Ian M. Shapiro Ideal for architects, engineers, and builders, as well as students in these fields Sure to be the standard reference on the subject for students, professionals, and anyone interested in sustainable design and construction of buildings, Green Building Illustrated is an informative, practical, and graphically beautiful resource.

Eco-Towers introduces readers to groundbreaking designs, most progressive projects, and innovative ways of thinking about a new generation of green skyscrapers that could provide solutions to crises the world faces today including climate change, depleting resources, deteriorating ecology, population increase, decreasing food supply, urban heat island effect, pollution, deforestation, and more. The book suggests that the eco-tower culminates the cultural and technological evolutions of the 21st century by building and improving on the experiences of earlier designs of skyscrapers and philosophies particularly green, sustainable, and ecological. It argues that the true green skyscraper is the one that engages successfully with its larger urban context by establishing symbiotic relationships with the social, economic, and environmental aspects. Since tall buildings are becoming larger and taller, serving greater number of people, and exerting higher demand on the environment and existing infrastructure, any improvements in their design and construction will significantly enhance urban conditions. The book elucidates how green skyscrapers better serve tenants, mitigate environmental impacts, and improve integration with the city infrastructure. It explains how skyscrapers' long life cycle offers the greatest justifications for recycling precious resources, and makes it a worthwhile to employ green features in constructing new skyscrapers and retrofitting existing ones. Subsequently, the book explores new designs that are employing cutting-edge green technologies at a grand scale including water-saving technologies, solar panels, helical wind turbines, sunlight-sensing LED lights, rainwater catchment systems, graywater and blackwater recycling systems, seawater-powered air conditioning, and the like. In the future, new building materials and smart technologies will continue to offer innovative design approaches to sustainable tall buildings with new aesthetics, referred to as "eco-iconic" skyscrapers.

LEED v4 Practices, Certification, and Accreditation Handbook, Second Edition, provides users with a practical user-friendly roadmap that presents the guidelines for selecting the LEED v4 rating system to better fit a particular project (e.g. LEED for Building Design and Construction, LEED for Operations and Maintenance, LEED for Interior Design and Construction, LEED for Building Design and Construction, or LEED for Neighborhood Development). In addition, this comprehensive handbook carefully explains the modifications in the credentialing process, including the new 3-Tier system requiring applicants to first take the LEEDTM Green Associate exam, followed by the LEEDTM Professional Accreditation exam. Practical strategies and guidelines for applying LEED v4 project certification Annotated tables, checklists, charts, and references to "quantum leap," LEED v4 Includes case studies with special focus is put on key

areas where most errors occur Demystifies LEED v4 requirements for project as well as personal/professional LEED Certification Appendixes including sample exam questions, acronyms and abbreviations and a glossary

"This study guide is a resource to help you prepare for the LEED Green Associate Examination. It summarizes the critical points of green design, construction, and operations. To help you master its content, the guide has been packaged with the Green Building and LEED Core Concepts Guide, one of the reference documents for the LEED Green Associate Exam. Within each category of the guide, you will find a variety of study tools, including category reviews, review questions and worksheets, learning activities, and practice questions"--P. 1.

Pass the LEED AP O+M Exam, Get Your Building LEED Certified, Fight Global Warming, and Save Money! The USGBC released LEED v4 in GreenBuild International Conference and Expo in November, 2013. The GBCI started to include the new LEED v4 content for all LEED exams in June 2014. We have incorporated the new LEED v4 content in this book. LEED (Leadership in Energy and Environmental Design) is one of the most important trends in development and is revolutionizing the construction industry. It has gained tremendous momentum and has a profound impact on our environment. From this book, you will be able to: 1. Identify your weakness through practice questions 2. Learn to work well under the pressure of timed tests 3. Check your responses against the solutions 4. Understand the solutions for the difficult questions through the explanations 5. Fully understand the scope, difficulty level, and format of the LEED AP O+M Exam 6. Learn how to pass the LEED AP O+M Exam There is NO official GBCI book on the LEED AP O+M Exam. LEED v4 AP O+M Mock Exams fills in the blanks and demystifies LEED. The book includes 200 questions and simulates the real exam in every aspect, including scope, difficulty level, format, and number of questions in each LEED category. It includes questions, answers, and explanations. This book is small and easy to carry around. You can read it whenever you have spare minutes. It is an indispensable resource for ordinary people, developers, brokers, contractors, administrators, architects, landscape architects, engineers, interns, drafters, designers, and other design professionals. All our books are available at GreenExamEducation.com Check out FREE tips and info for all LEED Exams and ARE Exams at GeeForum.com, you can post your questions for other users' review. What others are saying about LEED AP O+M Mock Exam … “These are TOUGH sample tests. You need this book.! “I used this book as a review in the day or two before my exam. The questions in this book could very well be found on the exam, but most actual exam questions will not be as complex as they are made here. Most of these questions on these mock exams have a twist or trick and many can only be answered if you know the materials backwards and forward. This makes for GREAT exam preparation because it makes you acutely aware of the types of tricks and the level of detail you MIGHT see on the exam...” — G. Patton “I highly recommend this book! “The book was extremely helpful for me passing the exam. The questions really challenged me to dig deeper into the details of each category. I felt this was one of several tools to help me be prepared for the exam. I highly recommend this book.” — Edwin F Sierra “Such a great tool! “I passed the exam at the first attempt. These mock exams helped me to learn how to tackle the problems and which areas I should focus on! I worked with another book of the author also. It took 2-3 weeks for my preparation.” — Chai

The second edition of Sustainable Buildings and Infrastructure continues to provide students with an introduction to the principles and practices of sustainability as they apply to the construction sector, including both buildings and infrastructure systems. As a textbook, it is aimed at students taking courses in construction management and the built environment, but it is also designed to be a useful reference for practitioners involved in implementing sustainability in their projects or firms. Case studies, best practices and highlights of cutting edge research are included throughout, making the book both a core reference and a practical guide.

Pass the LEED AP BD&C Exam, Get Your Building LEED Certified, Fight Global Warming and Save Money! The USGBC released LEED v4 in GreenBuild International Conference and Expo in November, 2013. The GBCI started to include the new LEED v4 content for all LEED exams in late Spring 2014. We have incorporated the new LEED v4 content in this book. Starting on December 1, 2011, GBCI began to draw LEED AP BD+C Exam questions from Green Building and LEED Core Concepts Guide. We have also incorporated the latest information from this book. LEED (Leadership in Energy and Environmental Design) is one of the most important trends in development and is revolutionizing the construction industry. It has gained tremendous momentum and has a profound impact on our environment. From this book, you will learn how to: 1. Pass the LEED AP BD+C Exam. 2. Register and achieve LEED certification for a building. 3. Understand the intent of each LEED prerequisite and credit. 4. Calculate points for LEED credits. 5. Indentify the credit path, submittal requirements, synergies, possible strategies and technologies, project phase, LEED submittal phase, and responsible party for each prerequisite and credit. 6. Earn extra credit (exemplary performance) for LEED. 7. Implement the related codes and standards. 8. Obtain points for categories not yet clearly defined by the USGBC. Most of the existing books on LEED and the LEED exams are too expensive and complicated to be practical or helpful. This guide fills in the blanks and demystifies LEED. It uncovers the secrets, codes, and jargon for LEED as well as the true meaning of "going green." It provides a solid foundation and fundamental framework for LEED. It covers every major aspect of LEED in plain and concise language, and introduces it to ordinary people. This guide is easy to carry around. You can read it whenever you have a few extra minutes. It is an indispensable book for ordinary people, developers, brokers, contractors, administrators, architects, landscape architects, engineers, interns, drafters, designers, and other design professionals. What others are saying about LEED BD&C Exam Guide … “Passed on first try, only used this guide “This is the best study guide HANDS DOWN. If you're serious about passing the LEED AP BD&C exam on your first try, this is the one you've been looking for! I bought Mr. Chen's LEED Green Associate Exam Guide2 months ago and passed it on the first try as well. I purchased the USGBC reference guide and Mr. Chen's LEED BD&C Exam Guide. I never opened the USGBC reference guide, only studied from Mr. Chen's study guide. I followed Mr. Chen's instructions and studied the guide for 2 weeks (yes, I have a full-time job). I did ignore

the mnemonics, not my learning style (makes it more confusing to me). The exam was not easy, but I prepared and stuck to this material. I am not a good test taker by no means. I reviewed the technical data of the guide about 6 times and ignored everything else I had read or heard about the exam. Here's a piece of advice that I picked up from this book, spend less time on practice tests and more time studying! I have a subscription to a web exam simulator (rated the best) and only did about 100 questions, until I realized that I was wasting my valuable time. Find a good book and stick to it. This is also a great reference guide to use on everyday projects. Review the material, try to understand it, then try to memorize it through repetition. I would like to shake your hand and say THANKS AGAIN MR. GANG CHEN !!! ” —LOBO “Excellent Guide and Good Manual “I passed the LEED AP BD+C and the LEED AP ID+C exams this year and Gang Chen's books were my primary study material! The books are easy to read and use. Gang Chen provides study hints and guidance as well as an outline format that makes it easy for the reader to grasp key points. He also provides an excellent review of the entire accreditation process which can save people time in personal research. The books are more than study guides; they are helpful as reference manuals because of the easy to follow format. Definitely a keeper in my bookshelf for future project reference.” —Karen M. Scott “Great resource for studying for the LEED Exam! “I have taken and passed the LEED AP BD+C exam and know what it takes. As this author says, it's not an easy exam and he is right. What is critical to passing is having great teaching tools and this book is one of them. He touches on every aspect of how to memorize data, how questions are formed, what to expect on tricky questions, the content the test writers are looking for and every little detail you need to know when preparing for this exam. I highly recommend this author's books if you are serious about passing any of the LEED exams, hopefully on the first try!” —S. Jennifer Sakiewicz “LEED BD & C Exam Study Guide “Gang Chan's study guide is an excellent resource in preparing to take the LEED AP BD+C exam particularly if one follows the study recommendation made in the guide. It does not replace the LEED Reference manual as the definitive source for technical information but more importantly provides a structure for the study of the information that is easily understood and when followed should provide good assurance of success in passing the exam the 1st time. This is a 'keeper'!” —Spock “Good summary of information to memorize for the test “Chen's exam guide is a good summary of the test relevant information in the LEED reference guide. He underlines specific information that is important to commit to memory for the test. It is a good way to understand which information needs to be strictly memorized if you are preparing for the test in a short amount of time and have a good understanding of the LEED process through your professional experience. I passed the test with a very high score on my first try, and I did use this guide, one other, the LEED reference manual, online sources, a class, and many years of personally working on and completing online LEED submittals through my work. The week before taking the test I used it to commit point values and those kind of details to memory... ” —Denver “Not a bulky ref guide “LEED BD&C Exam Guide does a great job in highlighting and summarizing the key points and concepts in USGBC ref guide. If you only have limited amount of time for LEED AP BD+C exam preparation, definitely go for this book.” —Metcalf “Very valuable guide! “I am a lighting designer and am preparing to take the LEED BD+C exam...I got LEED BD&C Exam Guide to prepare for the LEED AP BD+C Exam and it was fairly well organized to help me refresh my memory on the background LEED knowledge I had. All the specifics that one needs to know about each credit such as the Purpose of the credit, Credit path, Submittals, Strategies and technologies etc, are clearly organized for every credit. In addition the author also employs the smart technique of Mnemonics which helps in memorizing the vast amount of information in a simplified manner.” —Visswapriya Prabakar “Immensely valuable and utterly to the point, a true must have! “This is an excellent publication by Gang Chen that outlines precisely all the key points one need for success. I personally appreciate the easy to adopt memorization technique offered by the author. Practice exams are very comprehensive yet summarized and not to mention highly effective learning tool as it is designed in this book. It is a very delightful experience for me to have this outstanding publication. In a word, this definitely worth the money and for me it turns out extraordinarily helpful.” —Shanaz, who passed LEED AP BD+C Exam on the first try “Very Helpful! “I found LEED BD&C Exam Guide to be very detailed and very helpful. I plan to take the exam soon, and I feel fully prepared for it.” — Yousuf Asadzoi “Good book! “I had appeared for GA and passed. I loved the content and the underlined highlights. I read your book; it gave me insight and knowledge on how credits are applied. Some questions in your book helped me answer ones on the test. Good book, I'll go through it once again when I appear for AP.” —Haresh Vibhakar, AIIA (India), AIA, LEED Green Associate, Architect “A good outline “The book is an excellent outline to learn the necessary items required to study for the exam. It is not a comprehensive study guide in and of itself. Practice exam is good indicator of test preparation.” —Paul Levine “Solid LEED Study Guide “This is the kind of book I wish was available when I did my original LEED AP exam. It teaches you how to study, which is so important when school is a distant memory. The bulk of the book helps you review and memorize with mnemonics the concepts for each credit that you need to know for the exam. The questions are good representations of questions on the exam. I would recommend to anyone studying for their exam, that they: - First read the chapters in this book on how to study; - Second read the actual LEED BD+C guide to give you the background information on the credits and gain comprehension. Underline and review as the author indicates to get the most out of your study time. - Finally read the rest of this exam guide to help you review and memorize for the exam.” —missfitz "missfitz" “Very Helpful Guide “Gang Chen's LEED BD&C Exam Guides very helpful in consolidating information from USGBC and GBCI sources as well as providing the information that is necessary for the exam without excess irrelevant information. I highly recommend this book for preparation for the LEED BD+C exams.” —leedap

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
LEED Materials does not focus on the philosophy of building green or the reasons why it's a good thing. Most people understand why going green is a good thing, but in the end, the decision that people make, the products and materials that are applied, that make a difference. This book is the first step toward a healthier, more environmentally sensitive way of building. Steven Winter, former chairman of the U.S. Green Building Council, contributes a foreword.
Architecture 2030; BUG; Biophilic Design; BIPV; Circular Economy; LEED; Passive Design; Solar Chimney; Systems Thinking; WELL; Xeriscaping. What does it all mean? The complex and evolving language used in the sustainable design community can be very challenging, particularly to those new to environmentally friendly and resource-efficient design strategies that are needed today. Definitions of over two hundred terms with further sources. Clearly cross-referenced with Sustainaspeak, Theoryspeak, and Archispeak terms. Illustrated throughout with sustainable award-winning buildings by e.g. Behnisch, Brooks + Scarpa, EHDD, KieranTimberlake, Lake|Flato, Leddy Mahtum Stacy, SmithGroup, Perkins+Will, ZGF, VMDO, and McDonough + Partners. Sustainaspeak: A Guide to Sustainable Design Terms provides a current guide to the sustainable design strategies, terms, and practices needed for the next generation of designers, architects, students, and community leaders to design a carbon-neutral world for future generations.
Pass the LEED AP ID+C Exam, Get Your Building LEED Certified, Fight Global Warming and Save Money! The USGBC released LEED v4 in GreenBuild International Conference and Expo in November 2013. The GBCI started to include the new LEED v4 content for all LEED exams in June 2014. We have incorporated the new LEED v4 content in this book. LEED (Leadership in Energy and Environmental Design) is one of the most important trends in development and is revolutionizing the construction industry. It has gained tremendous momentum and has a profound impact on our environment. From this book, you will be able to: 1. Identify your weakness through practice questions 2. Learn to work well under the pressure of timed tests 3. Check your responses against the solutions 4. Understand the solutions for the difficult questions through the explanations 5. Fully understand the scope, difficulty level, and format of the LEED ID&C Exam 6. Learn how to pass the LEED ID&C Exam There is NO official GBCI book on the LEED AP ID+C Exam. LEED AP ID+C Mock Exams fills in the blanks and demystifies LEED. The book includes 200 questions and simulates the real exam in every aspect, including scope, difficulty level, format, and number of questions in each LEED category. It includes questions, answers, and explanations. This book is small and easy to carry around. You can read it whenever you have spare minutes. It is an indispensable resource for ordinary people, developers, brokers, contractors, administrators, architects, landscape architects, engineers, interns, drafters, designers, and other design professionals. All our books are available at GreenExamEducation.com Check out FREE tips and info for all LEED Exams and ARE Exams at GeeForum.com, you can post your questions for other users' review.
Facility performance evaluations inform the long-term life of a building and do not end with design or construction. To this aim, Patricia Andrasik created LEED Lab, in collaboration with the US Green Building Council, an increasingly popular international interdisciplinary collegiate laboratory course, which utilizes campus buildings as demonstration sites to facilitate the green assessment of existing buildings. LEED Lab: A Model for Sustainable Design Education uses the LEED O+M building rating system to measure and achieve performance-driven campus facilities in which the readers work and operate. The book explains in simple terms the theory, tasks, tools and techniques necessary for credit implementation and achievement, and includes case studies and exercises for practical application in each chapter. Readers will learn the conceptual scientific framework used to understand existing operational performance and how to quantify sustainable synergies, create green campus policies with administrators, and understand systems such as energy and water in a research-based application. The entire manual is accompanied by a vast online ‘Teaching Toolkit’ to provide helpful educational resources such as syllabi, lectures, examinations, assignments, Individual Student Progress Presentation (ISSP) templates, web resources, and much more. An excellent guide for undergraduate or graduate students enrolled in LEED Lab or a similar campus building assessment course, as well as construction or architectural professionals and facility managers, this manual navigates the complexities of using a green building diagnostic tool such as LEED O+M towards greater environmental literacy.
Pass the LEED Green Associate Exam, Get Your Building LEED Certified, Fight Global Warming, and Save Money! The USGBC released LEED v4 at the GreenBuild International Conference and Expo in November 2013. The GBCI started to include the new LEED v4 content for all LEED exams in late Spring 2014. We have incorporated the new LEED v4 content in this book. Starting on December 1, 2011, GBCI began to draw LEED Green Associate Exam questions from the second edition of Green Building and LEED Core Concepts Guide. We have incorporated this information in our book. LEED (Leadership in Energy and Environmental Design) is one of the most important trends of development and is revolutionizing the construction industry. It has gained tremendous momentum and has a profound impact on our environment. From this book, you will learn how to do the following: 1. Pass the LEED Green Associate Exam. 2. Use LEED exam preparation strategies, study methods, tips, suggestions, mnemonics, and exam tactics to improve your exam performance. 3. Effectively understand, digest, and retain your LEED knowledge. 4. Understand the process of registering and certifying a building for LEED. 5. Understand the scope, main intent, core concepts and strategies, as well as identify the regulations, recognition, and incentives for each major LEED category. 6. Identify the strategies for case studies. 7. Identify the synergy in case studies. 8. Implement the most important LEED related codes and building standards. 9. Get points for categories not yet clearly defined by the USGBC. This book fills in the blanks and demystifies LEED. It uncovers the secrets, codes, and jargon for LEED as well as the true meaning of "going green." It provides a solid foundation and fundamental framework for LEED. It covers every major aspect of LEED in plain and concise language, and introduces it to ordinary people. This guide is small and easy to carry around. You can read it whenever you have a few extra minutes. It is an indispensable book for ordinary people, developers,

brokers, contractors, administrators, architects, landscape architects, civil, structural, mechanical, electrical and plumbing engineers, interns, drafters, designers, and other design professionals. What others are saying about "LEED Green Associate Exam Guide"...(Part I) "Finally! A comprehensive study tool for LEED GA Prep!" "I took the one-day Green LEED Green Associate course and walked away with a power point binder printed in very small print--which was missing MUCH of the required information (although I didn't know it at the time). I studied my little heart out and took the test, only to fail it by 1 point. Turns out I did NOT study all the material I needed to in order to pass the test. I found this book, read it, marked it up, retook the test, and passed it with a 95%. Look, we all know the LEED Green Associate Exam is new and the resources for study are VERY limited. This one's the VERY best out there right now. I highly recommend it." --Consultant VA "Complete overview for the LEED Green Associate exam" "I studied this book for about three days and passed the exam ... if you are truly interested in learning about the LEED system and green building design, this is a great place to start." --K.A. Evans See all our books at GreenExamEducation.com Check out FREE tips on the easiest way to pass the LEED Green Associate Exam and info for all LEED Exams and ARE Exams at GeeForums.com, you can post your questions for other users' review.

Lean Project Delivery and Integrated Practices in Modern Construction is the new and enhanced edition of the pioneering book Modern Construction by Lincoln H. Forbes and Syed M. Ahmed. This book provides a multi-faceted approach for applying lean methodologies to improve design and construction processes. Recognizing the wide diversity in the landscape of projects, and encompassing private and public sector activity, buildings and infrastructure, the book expands upon the detailed coverage of integrated project delivery and new lean tools and techniques to include: Greater emphasis on the importance of creating a lean culture and the initiatives required to transform the industry; Expanded discussions of the foundational writings in lean construction theory; Exploration of the synergies between "lean" and "green" initiatives; Specific procedures for modifying planning and scheduling activities to improve the performance of the project team; Expanded sections on quality, and topics that have become a part of the lean lexicon, such as Choosing by Advantages, "line of balance"/location-based scheduling, virtual design teams, takt time planning and set-based design; Discussion questions for beginners and advanced lean practitioners; and Improved cross-referencing within the text to help the reader navigate the frameworks, techniques and tools to support the application of lean principles. The techniques described here enhance the use of resources, reducing waste, minimizing delays, increasing quality and reducing overall costs. They enable practitioners to improve the quality of the built environment, secure higher levels of customer/owner satisfaction, and simultaneously improve their profitability. This book is essential reading for all those wanting to be at the forefront of construction management and lean thinking.

This book offers a wealth of interdisciplinary approaches to urbanization strategies in architecture centered on growing concerns about the future of cities and their impacts on essential elements of architectural optimization, livability, energy consumption and sustainability. It portrays the urban condition in architectural terms, as well as the living condition in human terms, both of which can be optimized by mathematical modeling as well as mathematical calculation and assessment. Special features include: • new research on the construction of future cities and smart cities • discussions of sustainability and new technologies designed to advance ideas to future city developments Graduate students and researchers in architecture, engineering, mathematical modeling, and building physics will be engaged by the contributions written by eminent international experts from a variety of disciplines including architecture, engineering, modeling, optimization, and related fields.

Kitchen & Bath Sustainable Design is the National Kitchen and Bath Association's complete guide to "greening" these important rooms. The first book to focus exclusively on kitchen and bath sustainability, this full color guide covers every consideration for both remodels and new construction, making it a handy reference for any kitchen and bath professional. Case studies of award-winning projects demonstrate how space, budget, and sustainability can come together to create beautiful, functional, efficient rooms, and illustrations throughout provide visual examples of the techniques discussed. The book includes information on greening one's practice for the client's benefit, plus an appendix of additional resources and instructional materials for classroom use. The biggest elements of sustainable interior design-energy efficiency, water use, and materials selection-are all major players in the kitchen and bath. Clients are increasingly demanding attention to sustainability issues, and designers must be up to date on the latest guidelines, best practices, and technology. Kitchen & Bath Sustainable Design is the complete technical and practical guide to green design for the kitchen and bath professional.

The classic visual guide to the basics of building construction, now with the most current information For nearly three decades, Building Construction Illustrated has offered an outstanding introduction to the principles of building construction. This new edition of the revered classic remains as relevant as ever-providing the latest information in Francis D.K. Ching's signature style. Its rich and comprehensive approach clearly presents all of the basic concepts underlying building construction and equips readers with useful guidelines for approaching virtually any new materials or techniques they may encounter. Laying out the material and structural choices available, it provides a full under-standing of how these choices affect a building's form and dimensions. Complete with more than 1,000 illustrations, the book moves through each of the key stages of the design process, from site selection to building components, mechanical systems, and finishes. Illustrated throughout with clear and accurate drawings that present the state of the art in construction processes and materials Updated and revised to include the latest knowledge on sustainability, incorporation of building systems, and use of new materials Archetypal drawings offer clear inspiration for designers and drafters Reflects the most current building codes and CSI Master Format numbering scheme With its comprehensive and lucid presentation of everything from foundations and floor systems to finish work, Building Construction Illustrated, Fourth Edition equips students and professionals in all areas of architecture and construction with useful guidelines for approaching virtually any new materials or techniques they may encounter in building planning, design, and

construction.
Building on unique data, this book analyses the efficacy of a prominent climate change mitigation strategy: voluntary programs for sustainable buildings and cities. It evaluates the performance of thirty-five voluntary programs from the global north and south, including certification programs, knowledge networks, and novel forms of financing. The author examines them through the lens of club theory, urban transformation theory, and diffusion of innovations theory. Using qualitative comparative analysis (QCA) the book points out the opportunities and constraints of voluntary programs for decarbonising the built environment, and argues for a transformation of their use in climate change mitigation. The book will appeal to readers interested in sustainable city planning, climate change mitigation, and voluntarism as an alternative governance mechanism for achieving socially and environmentally desirable outcomes. The wide diversity of cases from the global north and south generate new insights, and offers practical guidelines for designing effective programs.
The leading green building reference, updated with the latest advances in the field Sustainable Construction is the leading reference for the design, construction, and operation of high performance green buildings. With broad coverage including architecture, engineering, and construction, this book nevertheless delivers detailed information on all aspects of the green building process, from materials selection to building systems and more. This new fourth edition has been updated to reflect the latest codes and standards, including LEED v4, and includes new coverage of carbon accounting. The discussion has been updated to align with the current thinking on economics, climate change, net zero buildings, and more, with contributions by leaders in the field that illustrate the most recent shifts in thinking and practice. Ancillary materials including an instructor's manual and PowerPoint presentations for each chapter help bring this clear and up-to-date information into the classroom, making this book a valuable reference for working construction professionals. Also, Interactive graphics found throughout the course help activate the content and highlight key concepts for students. Sustainable construction has gone mainstream, and will one day be the industry norm. This book provides a comprehensive reference to all aspects of a project to show you how green building concepts and principles apply throughout the design and construction process. Get up to date on the latest green building codes and standards Learn about the newest technology in green building materials Adopt the best practices in procurement and delivery systems Apply sustainability concepts to all aspects of construction and design Green buildings operate at a very high level of efficiency, which is made possible only by careful consideration every step of the way. Appropriate land use, landscaping, construction materials, siting, water use, and more all play a role in a structure's ultimate carbon footprint. Sustainable Construction provides clear guidance for all aspects of green building, including the most recent advances and the latest technology.
Green building is the fastest-growing trend to hit since the Internet, bringing with it an enormous range of new products, systems, and technologies. Green Building A to Z is an informative, technically accurate, and highly visual guide to green building, for both decision-makers and interested citizens. It begins with an introduction to the importance of green buildings and a brief history of the green building movement, outlines the benefits and costs of green buildings, and shows how you can influence the spread of green buildings. The book touches on key issues, such as enhancing water conservation, reducing energy use, and creating a conservation economy. The book examines all aspects of green buildings, including: Architecture 2030 Locally sourced materials Natural ventilation Solar energy Zero-net-energy buildings More than just a reference, this book emphasizes the importance of green buildings and green developments for a sustainable future. It will be an invaluable resource for businesspeople, homeowners, product manufacturers, developers, building industry professionals, and government officials.
Learn BIM the Revit Way Revit is Autodesk's industry-leading Building Information Modeling (BIM) software, and this Autodesk Official Training Guide thoroughly covers core Revit topics such as modeling, massing, sustainability, and more. It also brings you up to speed on advanced techniques such as using Revit in the cloud and how to go direct to fabrication. Organized by real-world workflows, this book covers the interface, templates, worksharing, modeling and massing, visualization techniques for different industries, sustainability, roofs and floors, stairs and railings, documentation, and much more. This Autodesk Official Training Guide teaches you how to use the leading BIM software and also serves as a study aid for Autodesk's Certified Associate and Certified Professional exams Organized according to actual workflows, the book begins with an explanation of key BIM concepts, familiarizes you with the interface, and then moves into actual application Covers modeling and massing, the Family Editor, visualization techniques for various industries, documentation, annotation and detailing, and how to work with complex walls, roofs, floors, stairs, and railings Companion website features before-and-after tutorial files, so readers can jump in at any point Mastering Autodesk Revit Architecture helps you learn Revit in a context that makes real-world sense.
Proven Strategies to Pass the LEED® AP HOMES Exam Here is the ideal study guide for understanding and preparing for the LEED® AP Homes exam. Written by an expert who is a LEED consultant and partner at Green Education Services—a premier LEED exam preparation provider—Guide to the LEED AP Homes Exam engages readers by breaking down difficult concepts in sustainable design and engineering in a clearly organized, straightforward manner that helps streamline the learning process for those seeking participation in the responsible design and construction of sustainable residential projects that implement green practices. Guide to the LEED AP Homes Exam features: An overview of the LEED Green Associate material included in the first portion of the LEED AP exam, along with specific Homes content A collection of sample test questions and study tips to reinforce learned material An accessible and stimulating approach that fosters quicker retention A set of strategies for summarizing critical information and details more effectively A wealth of material that includes drawings, charts, and diagrams to help understand concepts visually A total of 128 sample flashcards that allow you to study on the go! Covering the detailed concepts of the LEED for Homes™ Rating System, this book is an all-inclusive resource for achieving successful results on the LEED AP Homes exam.
This book deals with the present adverse effects of using precarious building materials on the ecology and human health. Also, the detailed discussions on the novel and greener construction materials and their utilization as an alternative to the conventional harmful existing methods and materials are also presented in the subsequent chapters. This book helps to fill the research gaps in the existing prior-art knowledge in the field of sustainable construction and green building materials and methods giving due importance to ecology and health, specifically to the fields

of sustainable structural engineering, sustainable geotechnical engineering, sustainable road engineering, etc. This book helps in achieving a sustainable environment through possible adoption of innovative and ecological construction practices. Hence, this book acts as a practical workbook, mainly for the academicians and practicing engineers who are willing to work toward the consecrated building industry. It is a well-established fact that the constructions of the engineering structures consume more and more earth resources than any other human activities in the world. In addition, the construction-related activities will produce several million tons of greenhouse gases, toxic emissions, water pollutants, and solid wastes. This creates a huge impact on environment and causes severe health issues on humans and animals. It is thus important to create an eco-friendly construction environment which can satisfy the ecological and health requirements.

Building Information Modelling (BIM) is a global phenomenon which is gaining significant momentum across the world. Currently there is little information on how to realise and monitor benefits from implementing BIM across the life-cycle of a built environment asset. This book provides a practical and strategic framework to realise value from implementing BIM by adapting Benefit Realisation Management theory. It presents an approach for practitioners aiming to implement BIM across the life-cycle of built environment assets, including both buildings and infrastructure. Additionally, the book features: wide-ranging information about BIM, the challenges of monitoring progress towards benefit goals and the greater context of implementation; a set of dictionaries that illustrate: how benefits can be achieved, what the benefit flows are and the enabling tools and processes that contribute to achieving and maximising them; a suite of measures that can serve to monitor progress with examples of how they have been used to measure benefits from BIM; real-world examples from across the world and life-cycle phases that show how these benefits can be achieved; and information on international maturity and competency measures to complement the value realisation framework. Including a blend of academic and industry input, this book has been developed in close collaborative consultation with industry, government and international research organisations and could be used for industry courses on BIM benefits and implementation for asset management or by universities that teach BIM-related courses.

This book discusses the potential of a systemic and multidisciplinary design approach to improve urban quality, health, livability, and inclusiveness for people living in informal settlements. In most instances, attempts to address informal settlements lack an adequate assessment of their impact on the wider built environment and implementation of the UN’s Sustainable Development Goals. The Integrated Modification Methodology (IMM), introduced here, offers a systematic, multidisciplinary design tool encompassing several of the aspects that define the environmental performance of urban systems. The book also demonstrates the application of the methodology to an informal settlement, proving its potential to guide systemicurban transformations, also in urban areas lacking formal planning. The case study investigated is in the Rocinha favela in Rio de Janeiro, which ischaracterized by poor water quality, lack of drainage and sanitation systems, and very few green spaces. Based on a rigorous methodology, the process described here can also be applied in similar contexts around the world.