

2010 Green Plumbing Mechanical Sustainability Training

Preservation of buildings involves multiple design decisions, all of which have a "sustainable" or "green" alternative. Written by a noted expert on the subject, Sustainable Preservation is the first comprehensive book on sustainable and green historic preservation for architects and preservation professionals. This resource explores issues from building location and site to building materials, lighting, systems, and the building envelope. With case studies of significant projects of various types of buildings, this book outlines key principles that architects and preservation professionals can put into practice.

Green Healthcare Institutions : Health, Environment, and Economics, Workshop Summary is based on the ninth workshop in a series of workshops sponsored by the Roundtable on Environmental Health Sciences, Research, and Medicine since the roundtable began meeting in 1998. When choosing workshops and activities, the roundtable looks for areas of mutual concern and also areas that need further research to develop a strong environmental science background. This workshop focused on the environmental and health impacts related to the design, construction, and operations of healthcare facilities, which are part of one of the largest service industries in the United States. Healthcare institutions are major employers with a considerable role in the community, and it is important to analyze this significant industry. The environment of healthcare facilities is unique; it has multiple stakeholders on both sides, as the givers and the receivers of care. In order to provide optimal care, more research is needed to determine the impacts of the built environment on human health. The scientific evidence for embarking on a green building agenda is not complete, and at present, scientists have limited information. Green Healthcare Institutions : Health, Environment, and Economics, Workshop Summary captures the discussions and presentations by the speakers and participants; they identified the areas in which additional research is needed, the processes by which change can occur, and the gaps in knowledge.

This familiar guide to information resources in the humanities and the arts, organized by subjects and emphasizing electronic resources, enables librarians, teachers, and students to quickly find the best resources for their diverse needs.

Get the comprehensive guide to the sustainable design of schools. The elementary and secondary school buildings and campuses built today are the schools of the future. Sustainable School Architecture is a guide to the planning, architecture, and design of schools that are healthy, stimulating, and will conserve energy and resources. Written with the needs of architects, construction professionals, educators, and school administration in mind, the book provides a road map for sustainable planning, design, construction, and operations. By its very nature, a school is often the centerpiece of its community and, therefore, well positioned to take the lead in influencing environmental awareness. Building on this point, Sustainable School Architecture shows how eco-friendly practices for school construction can create an environment that young students will emulate and carry into the world. Written by experts on sustainable school design, this book: Focuses on the links between best sustainable practices and the specific needs of educational institutions. Has nineteen international case studies of the best contemporary sustainable schools located in urban, suburban, and rural communities in temperate, tropical, and extreme climate zones. Contains valuable information on the California Collaborative for High Performance Schools (CHPS) and the Leadership in Energy and Environmental Design (LEED®) rating system. Serves as a resource for incremental modernization and operation strategies as well as comprehensive transformation. Offers tips on running an integrated, community-based design process with support information on the materials and systems of the sustainable school. Includes contributions by experts on approaches to the sites, systems, maintenance, and operation of sustainable schools. With a practical overview of how sustainability can be achieved in new and existing schools, and how to maintain this momentum in the years ahead, this important book provides architects with detailed guidance for designing healthier learning environments to help usher in a more promising future.

Water harvesting is gaining more and more recognition as a sustainable and resilient water supply options. It is economically viable, socially compatible and environmentally friendly. Water harvesting has proven to be a robust solution to overcome or reduce water shortages all over the world. It is important to understand how to apply this practice in a sustainable and effective way to make full use of its potential in a world increasingly threatened by water scarcity. The Handbook of Water Harvesting and Conservation: Basic Concepts and Fundamentals is the most comprehensive, up-to-date and applied handbook on water harvesting and conservation yet published. The book's 30 chapters -- written by 84 outstanding international experts from approximately 20 selected countries faced by drought -- explore, critique and develop concepts and systems for water harvesting. The editors bring together many perspectives into a synthesis that is both academically based and practical in its potential applications. The Handbook of Water Harvesting and Conservation: Basic Concepts and Fundamentals is an important tool for education, research and technical works in the areas of soil, water and watershed management and is highly useful for drought strategy planning, flood management and developing techniques to adapt to climate change in urban, agricultural, forest and rangeland areas.

People's desire to understand the environments in which they live is a natural one. People spend most of their time in spaces and structures designed, built, and managed by humans, and it is estimated that people in developed countries now spend 90 percent of their lives indoors. As people move from homes to workplaces, traveling in cars and on transit systems, microorganisms are continually with and around them. The human-associated microbes that are shed, along with the human behaviors that affect their transport and removal, make significant contributions to the diversity of the indoor microbiome. The characteristics of "healthy" indoor environments cannot yet be defined, nor do

microbial, clinical, and building researchers yet understand how to modify features of indoor environments—such as building ventilation systems and the chemistry of building materials—in ways that would have predictable impacts on microbial communities to promote health and prevent disease. The factors that affect the environments within buildings, the ways in which building characteristics influence the composition and function of indoor microbial communities, and the ways in which these microbial communities relate to human health and well-being are extraordinarily complex and can be explored only as a dynamic, interconnected ecosystem by engaging the fields of microbial biology and ecology, chemistry, building science, and human physiology. This report reviews what is known about the intersection of these disciplines, and how new tools may facilitate advances in understanding the ecosystem of built environments, indoor microbiomes, and effects on human health and well-being. It offers a research agenda to generate the information needed so that stakeholders with an interest in understanding the impacts of built environments will be able to make more informed decisions.

Synergistic Design of Sustainable Built Environments introduces and illustrates a novel systems approach that fosters both design excellence and a leap toward a more biocentric (ecologically sustainable) design paradigm. The book provides a deeper understanding of the theories and principles of biocentric design and offers detailed descriptions of the synergistic design process of integrating theories and principles into practice. It also presents extensive thermal and visual built environment design strategies, along with qualitative and quantitative information that designers can use to generate feasible solutions in response to varying climate and occupant comfort. Features: Examines the principles and practices of the synergistic design (a fusion of anthropocentric and biocentric) of sustainable built environments and how they relate to practical applications. Presents climatic data and its analysis along with sun-path diagrams for numerous cities to aid in the design of sustainable built environments in multiple regional contexts. Includes numerous case studies of sustainable built environments in varying climatic zones. Explains how renewable energy (solar, wind, biomass, geothermal, hydro, fuel cells) can be successfully integrated in the built environment. This forward-thinking and highly illustrated book will be an invaluable reference to all those concerned with sustainable built environments and related architectural issues.

2010 Green Plumbing and Mechanical Code Supplement Sustainable Water Challenges and Solutions from California Univ of California Press

Greening Health Care examines the intersections of health care and environmental health, both in terms of traditional failures and the revolution underway to fix them. Authored by one of the pioneers in health care's green movement, it presents practical solutions for health care organizations and clinicians to improve their environments and the health of their communities.

ABSTRACT There are five different publications that establish guidelines for sustainable building development that are examined in this report: (1) Leadership in Energy and Environmental Design ("LEED"); (2) CalGreen; (3) the International Green Construction Code ("IGCC"); (4) ASHRAE Standard 189.1 ("Standard 189.1"); and (5) The San Francisco's Green Building Ordinance ("SFGBO"). Having multiple publications can cause confusion among building developers, architects, engineers, building consultants, or various jurisdictions on what publication to follow, use, or reference in building development projects. This thesis will provide various parties involved in building development a thorough understanding of each publication and the similarities or differences between them, which will ultimately assist in identifying areas for all publications to improve. Specifically, this thesis demonstrates that the Material and Energy sections for all the publications must advance beyond the current requirements. Also, the comparison validates that CalGreen's Tier 2 is similar to LEED's local ordinances, like the SFGBO. This may mean two things: (1) LEED will need to advance its gold or platinum certification requirements, or potentially become less relevant; or (2) local ordinances should reference or adopt CalGreen Tier 2 so that there is common language between local and state regulations. This thesis identifies that LEED has the most stringent guidelines under the Building Site section out of all the publications. Likewise, the IGCC and Standard 189.1 have provisions under Water Use that push beyond other publications. Additionally, similar language between LEED and Standard 189.1 was found, which was unsurprising as both publications are authored by the USGBC.#.

The nation's first mandatory green building code is here - stay ahead of the game by knowing it! The California Green Building Standards Code (CGBSC), also referred to as CALGreen, contains regulations for energy efficiency, water efficiency and conservation, material conservation and resource efficiency, environmental quality, and more. It includes mandatory provisions for a variety of types of buildings, from commercial and low-rise residential to public schools. And the code's valuable appendices include voluntary provisions for all of these occupancies - and add hospitals. Logically organized with residential and non-residential provisions in separate chapters, the 2010 CA GREEN BUILDING STANDARDS CODE, TITLE 24 PART 11 is informative, thorough, and most of all, easy to use. Check out our app, DEWALT Mobile Pro(tm). This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

Contributing to the growing debate on the need for sustainable water use and management, with concrete examples of new approaches, concepts, arguments, methods and findings which illustrate how this can be achieved, this book will be attractive for large groups of readers familiar with one or more of the themes it tackles, and to the general public. Within this context, the book makes use of many tables and graphics, which bring the many messages together. This approach is intended not only for those working on water matters (e.g. bureaucrats, water managers, policymakers, journalists, etc.) and interested in water management issues and sustainability at large, but also for students of water management, water politics, environmental policy, water economics, water engineering and sustainability studies. Located at the crossroads of two key phenomena: sustainability and water, this book brings forward academic research and discussions on water efficiency, new technologies, and the water-agriculture nexus. It also benefits readers by tackling matters related to trans-boundary cooperation on water (including rainwater) and river-basin management, pricing issues, participatory water management, and the role of women in sustainable water use, amongst others.

Peterson's Green Careers in Energy pinpoints the best opportunities in the fastest-growing and most promising renewable energy fields-solar, wind, geothermal, and more-with data on the various jobs as well as colleges, organizations, and institutions that offer courses, degrees, certification, and training/retraining. *Green Careers in Energy* offers inspirational and insightful essays on the importance of sustainability, written by individuals at the forefront of environmental organizations, university sustainability efforts, and college training programs. This eBook also

features an exclusive bonus section, "What Is the New Green Economy," which examines the current interest in sustainability and the "New Energy for America" program. Throughout this book, there are energy-related features, including interviews with individuals working in many of these green careers. Other feature articles offer useful tips and advice for a more sustainable life.

This practical guide for educational leaders explores how you can transform your school or district into a vibrant center of learning and socio-ecological responsibility with only three manageable actions: taking students outside, bringing nature inside, and cultivating a mindset of awareness, responsibility, and empathy. This book is rich in practical, attainable approaches and stories of real actions taken by leaders, teachers, parents, and community partners to design, lead, and manage a vibrant, flourishing, sustainable learning community. Authors Uline and Kensler take you on an inspirational journey through nine key leadership strategies for you to begin or expand your work towards whole school sustainability.

Now there's an alternative to intimidating, cryptic plumbing code books: this much-needed, plain-English handbook is the first real-world, easy-to-use guide to learning the code and its implementation. Expertly reviews and interprets both the International Plumbing Code (IPC 2000) and the Uniform Plumbing Code (UPC 2000), helping designers and installers cut down on costs--and boost profits--through optimal usage of the code. Packed with examples, charts, photos, and that tables simplify code requirements, plus troubleshooting and safety procedures sections.

The GPMCS is the first and only one publication that spells out the best sustainable plumbing and mechanical building practices in simple, straightforward code language. The Green Supplement is not a "greener" version of the Uniform Codes, but rather a separate document establishing requirements for green building and water efficiency applicable to plumbing and mechanical systems.

The Codes Guidebook for Interiors, Fifth Edition features jargon-free explanations of all the codes and standards of concern to designers and architects, including performance codes, fire codes, building and finish standards, energy codes, and Americans with Disabilities standards. The book uses an easy-to-navigate format that is geared towards the code process as a whole, to take readers step-by-step through the codes relevant at each stage in the design process. Dozens of examples and a greatly enhanced set of illustrations, show how codes apply to real-world projects.

Water conservation is one of the most effective sustainable design practices, yet few professionals know how to collect and use rainwater effectively. Rainwater Harvesting the first comprehensive book on designing rainwater harvesting systems. It provides practical guidelines for developing a rainwater harvesting strategy, taking into account climate, public policies, environmental impact, and end uses. Case studies are included throughout. Rainwater Harvesting is a valuable reference for architects, landscape architects, and site engineers.

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

Energy audits have multiple goals including reducing energy consumption, managing costs and environmental impact. Improving the energy performance of existing buildings through energy retrofit measures is a great opportunity for developing sustainability in our structures and developing a green building economy. Green Energy Audit of Buildings considers this opportunity with a new and modern interpretation of the classic methodologies. This comprehensive guide to green energy audits integrates energy audit and LEED® methodologies to focus on energy and environment as strategic elements. In addition to these methodologies, Green Energy Audit of Buildings includes 45 check-list for field surveys and 97 technical sheets of possible energy retrofit actions that can be applied to existing real-world cases. Covering both the technical and economical points of view, Green Energy Audit of Buildings provides a comprehensive understanding and method for analyzing buildings and facilities in order to promote sustainability. Engineers, architects, energy assessors and managers in charge of building maintenance will all find this a key reference as well as lecturers, students and researchers looking to develop their understanding of sustainable buildings.

The #1 visual guide to building construction principles, updated with the latest materials, methods, and systems For over four decades, Building Construction Illustrated has been the leading visual guide to the principles of building construction. Filled with rich illustrations and in-depth content by renowned author Francis D.K. Ching, it offers students and practicing professionals the information needed to understand concepts in residential and commercial construction, architecture, and structural engineering. This Sixth Edition of Building Construction Illustrated has been revised throughout to reflect the latest advancements in building design, materials, and systems, including resilient design, diagrids, modular foundation systems, smart façade systems, lighting sources, mass timber materials, and more. It features new illustrations and updated information on sustainability and green building, insulation materials, and fire-rated wall and floor assemblies. This respected, industry standard guide remains as relevant as ever, providing the latest in codes and standards requirements, including IBC, LEED, and CSI MasterFormat. This Sixth Edition: The leading illustrated guide to building construction fundamentals, written and detailed in Frank Ching's signature, illustrative style Includes all new sections on resilient design; diagrids; modular foundation systems; smart façade types and systems; lighting sources and systems; and mass timber materials, cross laminated timber (CLT) and nail laminated timber (NLT) Revised to reflect that latest updates in codes and standards requirements: 2018 International Building Code (IBC), LEED v4, and CSI MasterFormat 2018 Includes updated information on sustainability and green building; insulation materials; stair uses; stoves and inserts; and fire-rated wall and floor assemblies Offers instructors access to an Instructor's Manual with review questions Building Construction Illustrated, Sixth Edition is an excellent book for students in architecture, civil and structural engineering, construction management, and interior design

programs. Ching communicates these core principles of building construction in a way that resonates with those beginning their education and those well into their careers looking to brush up on the basics. Building Construction Illustrated is a reliable, lifelong guide that practicing architects, engineers, construction managers, and interior designers, will turn to time and again throughout their careers.

Sustainable Construction Technologies: Life-Cycle Assessment provides practitioners with a tool to help them select technologies that are financially advantageous even though they have a higher initial cost. Chapters provide an overview of LCA and how it can be used in conjunction with other indicators to manage construction. Topics covered include indoor environment quality, energy efficiency, transport, water reuse, materials, land use and ecology, and more. The book presents a valuable tool for construction professionals and researchers that want to apply sustainable construction techniques to their projects. Practitioners will find the international case studies and discussions of worldwide regulation and standards particularly useful. Provides a framework for analyzing sustainable construction technologies and economic viability Introduces key credit criteria for different sustainable construction technologies Covers the most relevant construction areas Includes technologies that can be employed during the process of construction, or to the product of the construction process, i.e. buildings Analyzes international rating systems and provides supporting case studies

Looking for information on great green programs provided by labor unions? As part of Peterson's Green Careers in Energy, this eBook offers profiles of ten labor unions that offer apprenticeship and training programs to upgrade members' skills for the green energy economy, including the National Labor College, which grants undergraduate degrees and certificates to AFL-CIO members. Union information includes contact information, details about the union, and info on the programs and training.

Winner of an Outstanding Academic Title Award from CHOICE Magazine Encyclopedia of Environmental Management gives a comprehensive overview of environmental problems, their sources, their assessment, and their solutions. Through in-depth entries and a topical table of contents, readers will quickly find answers to questions about specific pollution and management issues. Edited by the esteemed Sven Erik Jørgensen and an advisory board of renowned specialists, this four-volume set shares insights from more than 500 contributors—all experts in their fields. The encyclopedia provides basic knowledge for an integrated and ecologically sound management system. Nearly 400 alphabetical entries cover everything from air, soil, and water pollution to agriculture, energy, global pollution, toxic substances, and general pollution problems. Using a topical table of contents, readers can also search for entries according to the type of problem and the methodology. This allows readers to see the overall picture at a glance and find answers to the core questions: What is the pollution problem, and what are its sources? What is the "big picture," or what background knowledge do we need? How can we diagnose the problem, both qualitatively and quantitatively, using monitoring and ecological models, indicators, and services? How can we solve the problem with environmental technology, ecotechnology, cleaner technology, and environmental legislation? How do we address the problem as part of an integrated management strategy? This accessible encyclopedia examines the entire spectrum of tools available for environmental management. An indispensable resource, it guides environmental managers to find the best possible solutions to the myriad pollution problems they face. Also Available Online This Taylor & Francis encyclopedia is also available through online subscription, offering a variety of extra benefits for researchers, students, and librarians, including: Citation tracking and alerts Active reference linking Saved searches and marked lists HTML and PDF format options Contact us to inquire about subscription options and print/online combination packages. US: (Tel) 1.888.318.2367 / (email) e-reference@taylorandfrancis.com International: (Tel) +44 (0) 20 7017 6062 / (email) online.sales@tandf.co.uk

Green restorations for historic homes.

This edited collection broadens the definition of sustainable real estate based on industry trends, research, and the Paris Climate Agreements. Discussions encompass existing and new buildings throughout their life cycle, the financing of their development and operations, and their impact on the surrounding environments and communities. This broader perspective provides a better understanding of the interconnected nature of the environmental, societal, communal, political, and financial issues affecting sustainable real estate, revealing the wide-ranging impact of practitioners' decisions on the sustainable real estate system. Bringing together carefully selected articles from leading global academic and practitioner experts from urban planning, design, construction, and finance, this collection brings to light new opportunities and innovative transdisciplinary solutions to as-yet unresolved problems.

The comprehensive study guide for understanding interior codes This revised and updated seventh edition of the Study Guide for the Codes Guidebook for Interiors is an essential companion to The Codes Guidebook for Interiors, the industry's reference of choice, with complete coverage of the major codes and standards that apply to interior projects. This Study Guide includes term lists, practice questions, practical application exercises, code tables, checklists, and a book companion site featuring interactive checklists, helping designers and architects check their knowledge and comprehension from reading The Codes Guidebook for Interior chapters and prepare for the NCIDQ and ARE exams. Since The Codes Guidebook for Interiors text covers the latest requirements, standards, terminology, and federal regulations, including the 2015 ICC, the current ADA standards, and ICC/ANSI requirements as well as information on green construction, this companion study guide is a comprehensive measure of designers understanding and application of codes for interior projects. It can help design students learn and practitioners keep their skills up to date. Because it is vital that designers and architects have an up-to-date working knowledge of the various codes involved with building interiors, whether during renovation or new construction, the study guide offers them an opportunity to: Check their knowledge of the key terms of the industry Test their working knowledge of codes using the practice questions and problem scenarios Utilize the code tables during the design process Employ the numerous checklists on proposed and real life projects to ensure complete compliance The revised Study Guide is a useful companion to The Codes Guidebook for Interiors, the essential reference for all interior professionals. Check your understanding of the individual chapters as exam prep or even just as a self-test. For the designer, architect, or student, the Study Guide for The Codes Guidebook for Interiors is a must-have resource.

THE MOST TRUSTED AND UP-TO-DATE WATER TREATMENT PLANT DESIGN REFERENCE Thoroughly revised to cover the latest standards, technologies, regulations, and sustainability practices, Water Treatment Plant Design, Fifth Edition, offers comprehensive guidance on modernizing existing water treatment facilities and planning new ones. This authoritative resource discusses the organization and execution of a water treatment plant project--from planning and permitting through design, construction, and start-up. A joint publication

of the American Water Works Association (AWWA) and the American Society of Civil Engineers (ASCE), this definitive guide contains contributions from renowned international experts. **COVERAGE INCLUDES:** Sustainability Master planning and treatment process selection Design and construction Intake facilities Aeration and air stripping Mixing, coagulation, and flocculation Clarification Slow sand and diatomaceous earth filtration Oxidation and disinfection Ultraviolet disinfection Precipitative softening Membrane processes Activated carbon adsorption Biological processes Process residuals Pilot plant design and construction Chemical systems Hydraulics Site selection and plant arrangement Environmental impacts and project permitting Architectural design HVAC, plumbing, and air supply systems Structural design Process instrumentation and controls Electrical systems Design reliability features Operations and maintenance considerations during plant design Staff training and plant start-up Water system security and preparedness Construction cost estimating

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.

When the rivers run dry--water solutions for a thirsty planet. In the Age of Scarcity now upon us, fresh water shortages are an increasingly serious global problem. With water restrictions emerging in many developed countries and water diversions for industrial, urban, and environmental reasons stirring up oceans of controversy, there is a growing thirst for innovative approaches to reducing our water footprint. Dry Run shows the best ways to manage scarce water resources and handle upcoming urban water crises. Featuring original interviews with more than twenty-five water researchers and industry experts, this book explains water issues and proposes solutions for homes, buildings, facilities, and schools. Examining the vital linkages between water, energy use, urban development, and climate change, Dry Run demonstrates best practices for achieving "net zero" water use in the built environment, including: Water conservation strategies for buildings, factories, cities, and Rainwater harvesting Graywater reuse and water reclamation systems Water efficiency retrofits On-site sewage treatment New water reuse and supply technologies Ideal for concerned citizens, building managers, homeowners, architects, engineers, developers, and public officials faced with charting a course in a more arid future, Dry Run overflows with practical solutions. Jerry Yudelson , PE, LEED AP, leads the Yudelson Associates consultancy and is a leading authority on green building, clean water, and sustainable development. He is the author of eleven books, including Choosing Green and Green Building A to Z .

The Routledge Companion for Architecture Design and Practice provides an overview of established and emerging trends in architecture practice. Contributions of the latest research from international experts examine external forces applied to the practice and discipline of architecture. Each chapter contains up-to-date and relevant information about select aspects of architecture, and the changes this information will have on the future of the profession. The Companion contains thirty-five chapters, divided into seven parts: Theoretical Stances, Technology, Sustainability, Behaviorism, Urbanism, Professional Practice and Society. Topics include: Evidence-Based Design, Performativity, Designing for Net Zero Energy, The Substance of Light in Design, Social Equity and Ethics for Sustainable Architecture, Universal Design, Design Psychology, Architecture, Branding and the Politics of Identity, The Role of BIM in Green Architecture, Public Health and the Design Process, Affordable Housing, Disaster Preparation and Mitigation, Diversity and many more. Each chapter follows the running theme of examining external forces applied to the practice and discipline of architecture in order to uncover the evolving theoretical tenets of what constitutes today's architectural profession, and the tools that will be required of the future architect. This book considers architecture's interdisciplinary nature, and addresses its current and evolving perspectives related to social, economic, environmental, technological, and globalization trends. These challenges are central to the future direction of architecture and as such this Companion will serve as an invaluable reference for undergraduate and postgraduate students, existing practitioners and future architects.

"Water scarcity, urban population growth, and deteriorating infrastructure impact water security around the globe. As California wrestles with the most significant drought in its recorded history, struggling to secure reliable water supplies for the future, it faces all of these crises. The story of California water, its history and its future, includes cautions and solutions for any region seeking to manage water among the pressures of a dynamic society and environment. Written by leading policy makers, lawyers, economists, hydrologists, ecologists, engineers and planners, Sustainable Water reaches across disciplines, uncovering connections and intersections. The solutions and provocations put forward in this book integrate water management strategies to increase resilience in a changing world"--Provided by publisher. **GREEN BUILDING MATERIALS THE ULTIMATE USER'S MANUAL TO GREEN BUILDING MATERIALS** To properly select and specify green building materials, successful architects need authoritative, real-world advice on how to select and use nontoxic, recycled, and recyclable products, and how to integrate these products into the design process in order to capitalize on the many practical and economic advantages of "going green." Green Building Materials, Third Edition is the most reliable, up-to-date resource to meet today's green building challenges—from reducing waste and improving energy efficiency to promoting proper code compliance and safeguarding against liability claims. Written by two nationally known experts on green building methods and materials, Green Building Materials, Third Edition offers in-depth, practical information on the product selection, product specification, and construction process. This new Third Edition is an excellent hands-on guide to today's newest range of green building materials: what they are, where to find them, how to use them effectively, and how to address LEED requirements. Organized by CSI MasterFormat® category for fast access to specific information, it features: A new chapter on eco-labels, green standards, and product certification A new appendix providing reference information for sustainability standards and standards development organizations New sample specifications, including green power requirements, vegetated green roof systems, rainwater harvesting, and water reuse systems Revised and updated review of trends affecting the future of green building materials Updated approach and reference information for the product selection process Green Building Materials, Third Edition is an essential tool for designing environmentally friendly buildings—ones made from materials that preserve the Earth's natural legacy for future generations.

Leadership for Green Schools provides aspiring and practicing leaders with the tools they need to facilitate the design, leadership, and management of greener, more sustainable schools. Framed by theory

and research, this text draws from the fields of sustainability science, built learning environment, and educational leadership to explain what green schools look like, what role school buildings play in advancing sustainable organizational and instructional practices, and why school leaders are "greening" their leadership. Sustainability can often seem like an unreachable, utopian set of goals, but this important resource uses illustrative examples of successful schools and leaders to show how establishing and managing green schools aligns with the work they are already doing to restore engaged learning within their schools and communities. Leadership for Green Schools is a unique and important resource to help leaders reduce the environmental impact of school buildings and immerse students in purposeful, meaningful learning for a sustainable, just future. Special Features: Examples from award-winning schools and leaders—best-practices and illustrative examples throughout make whole school sustainability come to life and show how green leadership is a real possibility for the reader. Aligned with Professional Standards for Educational Leadership—provides the tools necessary for leaders to advance sustainability goals while at the same time fulfilling the core purposes of their job. End-of-chapter discussion questions—valuable pedagogical tools invite personal reflection and conversation. This multidisciplinary handbook explores concrete case studies which illustrate how sustainability science and research can contribute to the realization of the goals of the 2030 Agenda for Sustainable Development. It contains contributions from sustainability researchers from across the world.

[Copyright: 0994ce39d984233f8124d9be65b7f3ec](#)