Materials for Sustainable Sites: A Complete Guide to the Evaluation, Selection, and Use of Sustainable Construction Materials

Meg Calkins
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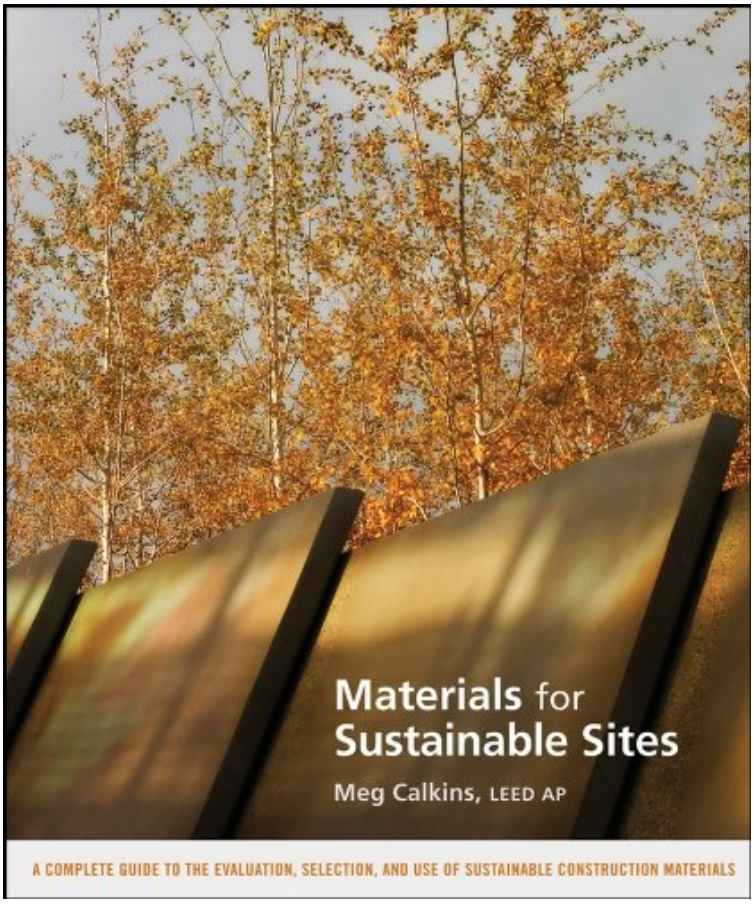

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Meg Calkins : Materials for Sustainable Sites: A Complete Guide to the Evaluation, Selection, and Use of Sustainable Construction Materials before purchasing it in order to gage whether or not it would be worth my time, and all praised Materials for Sustainable Sites: A Complete Guide to the Evaluation, Selection, and Use of Sustainable Construction Materials:

7 of 7 people found the following review helpful. An Invaluable Resource for SustainabilityBy Christopher GutscheMaterials for Sustainable Sites is an invaluable resource for architects who practice sustainable design. This work provides an in-depth and thorough analysis of the major building materials used in design and construction; while geared toward site design it is also applicable to architectural projects that utilize these materials. It details and makes easily accessible sustainable criteria for materials from extraction and production to delivery and implementation. Sustainability is not simple. Making intelligent and informed decisions requires navigating a complex

web of interrelationships and choices. Calkins provides an unbiased, factual and encouraging tool to understand sustainability issues and to promote sustainable practices in design and construction and the materials industry.Materials for Sustainable Sites is also a vehicle for clear communication between architects and their clients, consultants and contractors that can help in evaluating, understanding and encouraging innovative practices. This can be of great use especially when the architect does not have the benefit of consultants versed in sustainable practices. Or when the architect provides services on projects in which many materials components and sourcing are chosen and directed by the contractor.Calkins is clearly devoted to and passionate about promoting sustainable practices and has given us a tool and a resource for changing our world and providing a future for our children. As Calkins states "Many small steps can add up to big impacts, and small steps over and over can result in a changed materials industry - an industry that closes material loops; eliminates toxins and toxic waste; and uses durable, local materials." Now it is up to us to implement these steps.Christopher Gutsche, Architect, Principal, LEED APEcosmith Architecture Consulting8 of 8 people found the following review helpful. A great resource for designers and builders alike.By J. DzikowskiAs a current LA student, I found this book immensely informative, and will no doubt return to it often for reference. As a former home builder, I recognize that this book offers a comprehensive, true cost assessment of both common and uncommon building materials.In short, this book is a great resource for those who are interested in discovering, understanding and comparing sustainable building materials.

This complete guide to the evaluation, selection, and use of sustainable materials in the landscape features strategies to minimize environmental and human health impacts of conventional site construction materials as well as green materials. Providing detailed current information on construction materials for sustainable sites, the book introduces tools, techniques, ideologies and resources for evaluating, sourcing, and specifying sustainable site materials. Chapters cover types of materials, both conventional and emerging green materials, environmental and human health impacts of the material, and detailed strategies to minimize these impacts. Case studies share cost and performance information and lessons learned.

"Meg Calkin states that materials used in construction of the built environment are damaging the world's ecosystems at an alarming rate. Her book, Materials for Sustainable Sites, is a timely and comprehensive response to the public's growing desire to think, buy and build sustainably. The book title accurately identifies its purpose and value to landscape architects, architects, civil engineers, urban designers and construction management. It provides a guide to professionals who are unsure how to incorporate more sustainable design, techniques and materials into their practice. this book is destined to become an indispensable resource." (Landscape and Urban Planning Journal, 2009) "hellip;a text specifically targeted to the site applications but which can be referred to in selecting construction materials. It is divided into two parts; the first is ostensibly devoted to honing a technique for specifying materials responsibly, and resources available to help that approach; the second explores nine different materials, steps being taken to reduce their ecological footprints, and notes to consider when specifying these fundamentals" (GreenSource.com, September 2009) "hellip;Calkins makes complex matters understandable even for nonexperts. In each section that I sampled, I came away pleased by how much Calkins was able to convey, and how clearly. Materials for Sustainable Sites is an instructive and frequently enlightening book. It deserves a place on the new urbanist bookshelf..." (New Urban News, March 2009) "This book, for the profession of landscape architecture is highly important in identifying the consequences of poorly chosen materials on human health. So read this book, and use it as a guide. Even more importantly, lend it to others and teach the world the importance of the practice of being sustainable." (larcexchange.com, February 11th, 2009) "Minimizing environmental and human health impacts of site construction materials is the focus of Materials for Sustainable Sites." (Construction Specifier, December 2008) "This book is a serious reference manual. Nearly every page has diagrams, tables of definitions and comparisons, and lists of guidelines. The timing of this bookrsquo;s publication is ideal, being aligned with the launch of the Sustainable Sites Initiative, to which Calkins has contributed expertise. Materials for Sustainable Sites will be the constant companion of landscape architects and related professionals who want both inspiration and credible information about the sustainable palette of our art." (Landscape Architecture, April 2009) "Weightly tome offering a comprehensive guide to evaluating selecting and using sustainable construction materials." (Grand Designs, April 2009)nbsp; "hellip;provides detailed information for architects and builders on materials and products that use resources efficiently, minimize embodied energy and carbon, avoid harming human or environmental health at any phase of their life cycle, and assist with sustainable site design strategies." (Book News; 12/08) "When it comes time to choose materials for those home and garden projects, there's now a wonderful green guide. This guidebook is indispensable for anyone planning construction projects. It is destined to become a classic." (bellaonline.com; 11/08) In this book, Calkins (architecture and planning, Ball State Univ.) focuses on the environmental and human health impact of construction materials during their manufacture, transport, installation, use, and disposal, and guides the reader in evaluating, selecting, and using these materials. The work contains 13 chapters, each ending with a list of pertinent references. The first chapter offers a definition of materials for sustainable sites. The following three chapters cover

various topics including evaluating the environmental impact of materials and designing with reclaimed, reprocessed, and recycled materials. The remaining nine chapters address in detail such materials as concrete, earthen materials, brick masonry, asphalt pavement, aggregates and stone, wood, metals, plastics and rubber, and biobased materials. The volume ends with two useful appendixes on embodied energy and carbon in construction materials, and on hazardous air pollutants and metals related to construction materials. The book is well written, with mostly good illustrations and informative tables; the binding is rather weak. It will make a good acquisition by an academic or industrial library. Includes a very comprehensive index. Summing Up: Recommended. Graduate through professional architecture and civil and environmental engineering collections. (T. Z. Kattamis, University of Connecticut, CHOICE, March 2009) In this new book, Calkins tells you everything you need to know about materials for sustainable design. This book is certain to become the classic reference for all designers and builders who want to pursue creative design in a way that will help protect the planet.(GardenDesignonline.com, October 20, 2008) It's rare to find a must-read book for the profession of landscape architecturehellip;this book is an amazing reference for use during the design process, when assembling materials for use in sustainable ways. This will also be a great tool for planning, ecosystem valuation, life-cycle costing, and many other uses. Planners, designers, and everyone in between will find a use for Materials for Sustainable Siteshellip; this is not a presentation of new source material or research, but rather a comprehensive and encyclopedic collection that provides, dare I say, THE essential source for sustainable materials. (Landscape+Urbanism blogspot.com, October 2, 2008)From the Back CoverA complete guide to evaluating, selecting, and using sustainable construction materials Environmental and human health impacts of materials are a hidden cost of our built environment. While we can readily see the impact of destroying a wetland to build a mall, we aren't always aware of the "invisible" effects on the environment as raw materials are harvested, and products manufactured and shipped from thousands of miles away from the site. Materials for Sustainable Sites guides architects, engineers, contractors, and landscape architects in making the right choices to minimize their projects' environmental and human health impactsmdash;whether the right answer is a new, green material or a conventional, tried-and-true material used in green ways. This book provides detailed and current information on construction materials for sustainable sites, including: General environmental and human health impacts of the materials and products industry Tools, techniques, ideologies, and resources for evaluating, sourcing, and specifying sustainable site materials Methods of specifying the nine basic types of conventional and emerging green site construction materials: concrete, earthen materials, brick masonry, asphalt pavement, aggregates and stone, wood, metals, plastics, and nonliving bio-based materials to minimize their impacts. Materials for Sustainable Sites prepares designers, engineers, and builders with the information they need to incorporate sustainable site design into every project.About the AuthorMeg Calkins, LEED AP, holds master's degrees in both architecture and landscape architecture from the University of California at Berkeley, and is currently on the faculty of the College of Architecture and Planning at Ball State University. She has written numerous articles and book chapters on sustainable site materials and serves as an Editorial Advisory Board Member for Landscape Architecture Graphic Standards. She served for many years on the LEED Sustainable Sites Technical Advisory Group and is currently on the Materials Subcommittee of the Sustainable Sites Initiative.