

## Rawlinsons Construction Cost Guide 2013

*Australia's largest library of construction cost information, providing vital data to all those involved in small projects. This guidebook is a practical and essential tool providing everything necessary for structural design engineers to create detailed and accurate calculations. Basic information is provided for steel, concrete and geotechnical design in accordance with Australian and international standards. Detailed design items are also provided, especially relevant to the mining and oil and gas industries. Examples include pipe supports, lifting analysis and dynamic machine foundation design. Steel theory is presented with information on fabrication, transportation and costing, along with member, connection, and anchor design. Concrete design includes information on construction costs, as well as detailed calculations ranging from a simple beam design to the manual production of circular column interaction diagrams. For geotechnics, simple guidance is given on the manual production and code compliance of calculations for items such as pad footings, piles, retaining walls, and slabs. Each chapter also includes recommended drafting details to aid in the creation of design drawings. More generally, highly useful aids for design engineers include section calculations and force diagrams. Capacity tables cover real-world items such as various slab thicknesses with a range of reinforcing options, commonly used steel sections, and lifting lug capacities. Calculations are given for wind, seismic, vehicular, piping, and other loads. User guides are included for Space Gass and Strand7, including a non-linear analysis example for lifting lug design. Users are also directed to popular vendor catalogues to acquire commonly used items, such as steel sections, handrails, grating, grouts and lifting devices. This guidebook supports practicing engineers in the development of detailed designs and refinement of their engineering skill and knowledge.*

*Australia's largest library of construction cost information, providing vital data to all those involved in medium and larger projects. Responsible Innovation encourages innovators to work together with stakeholders during the research and innovation process, to better align the outcomes of innovation with the values, needs and expectations of society. Assessing the benefits and costs of Responsible Innovation is crucial for furthering the responsible conduct of science, technology and innovation. However, there is until now only limited academic work on Responsible Innovation assessment. This book fills this lacuna. Assessment of Responsible Innovation: Methods and Practices presents tools for measuring, monitoring, and reporting upon the Responsible Innovation process and the social, environmental, scientific, and economic impacts of innovations. These tools help innovators to mitigate risk and to strengthen their strategic planning. This book aligns assessment tools and practices with the UN Sustainable Development Goals (SDGs). The prospects as well as the limitations of various Responsible Innovation assessment approaches and tools are discussed, as well as their applicability in various industry contexts. The book brings together leading scholars in the field to present the most comprehensive review of Responsible Innovation tools. It articulates the importance of assessment and value creation, the different metrics and monitoring systems that can be deployed and the reporting mechanisms, including the importance of effective communication.*

*Construction Cost Management*

*Decision-making in an Uncertain World*

*Life-Cycle Cost Models for Green Buildings*

*A Systems Perspective to the Development of Civil Engineering Facilities*

*Rawlinsons Construction Cost Guide 2022*

*Logics of War*

Indonesia has begun to emerge into middle-income status, yet persistent poverty and stark inequalities continue to affect young children’s development. This book tells the story of Indonesia’s efforts to change the trajectory of development, similar aims, but several aspects of what is reported here are especially valuable and perhaps unique. The study offers data on all aspects of health and development in a sample of rural young children, collected with internationally-validated information, information about parenting practices including feeding patterns, parent questionnaires, and data on the prevalence and distribution of ECED services. The data reported in this book is based on a sample of more than 6,000 Indonesian villages, including two age cohorts (aged 1 and 4 years old when data were first collected on their development in 2009). From the start, the project aimed not only to support service provision but also to support the development of national capacity, and encourage the establishment of a system of ECED quality assurance, efforts that are still in process. Few such analyses have been done with such a large sample and with multiple measures. These design features allow a high level of detail to be reported. The lessons from this book will help to inform not only this project’s further implementation but ECED initiatives in Indonesia and around the world. Thus, the results presented in this book are of significance for researchers, policymakers, and service providers; and • Advocates for quality early childhood services.

This practical guide to cost studies of buildings has been updated and revised throughout for the 5th edition. New chapters have been added on the RICS New Rules of Measurement (NRM) for order of cost estimating and elemental cost analysis of construction projects.

Cash is king, not least in the construction industry. Recent government-commissioned reports have highlighted the importance of better financial management in the construction industry. This professional text provides a considered analysis of financial management in construction; notably it covers cash flow modelling and provides the first detailed investigation of the contentious issue of cash farming. Through use of case studies, worked examples and questions this book will help you to understand the issues. Procurement Systems details the whole spectrum of procurement issues in the construction industry, starting with the client /customer and running through managerial, cultural and IT-based issues. The book commences with an overview of procurement criteria is provided to enable practitioners to make their choices of procurement form. Importantly, performance comparisons of different procurement forms are discussed and the main emphasis of the book is to highlight best practice but each chapter deals specifically with developmentally orientated procurement issues in NICs (newly industrialised countries), where best practice is assessed from a different set of perspectives. The authors contributing to this book are among the leading experts in the field.

Signage and Wayfinding Design

The Book of Coniston

Procurement Systems

A Complete Guide to Creating Environmental Graphic Design Systems

The Australian Community Land Trust Manual

Constructing the Future

Warfare in Atlantic Africa, 1500-1800 investigates the impact of warfare on the history of Africa in the period of the slave trade and the founding of empires. It includes the discussion of:
\* the relationship between war and the slave trade
\* the role of Europeans in promoting African wars and supplying African armies
\* the influence of climatic and ecological factors on warfare patterns and dynamics
\* the impact of social organization and military technology, including the gunpowder revolution
\* case studies of warfare in Sierra Leone, the Gold Coast, Benin and West Central Africa

This essential book introduces the concept of nD modelling, which takes the theory of computer modelling of the built environment to n dimensions. nD modelling utilizes a decision support tool for systematic assessment and comparison between various design parameters such as cost, accessibility, maintainability, sustainability, crime, energy, whole life costing, acoustics and scheduling among others. Constructing the Future is a comprehensive book which provides a global perspective on the concept of nD modelling and examines its impact on construction, from development to application. The text offers a critique of competing views that seek to justify (or ignore) the role of nD modelling in the future of construction as well as describing developments in this area which are already happening worldwide. Presenting a thorough critique of competing views as well as providing guidance on best practice, Constructing the Future is a bold, well-grounded and illustrated title introducing construction management professionals and researchers to this exciting new development in the quest for a single building and product model.

In this updated and expanded second edition, Keith Potts and Nii Ankrah examine key issues in construction cost management across the building and civil engineering sectors, both in the UK and overseas. Best practice from pre-contract to post-contract phases of the project life-cycle are illustrated using major projects such as Heathrow Terminal 5, Crossrail and the London 2012 Olympics as case studies. More worked examples, legal cases, case studies and current research have been introduced to cover every aspect of the cost manager’s role. Whole-life costing, value management, and risk management are also addressed, and self-test questions at the end of each chapter support independent learning. This comprehensive book is essential reading for students on surveying and construction management programmes, as well as built environment practitioners with cost or project management responsibilities.

‘Supply Chain Management’ illustrates the key drivers of good supply chain management in order to help students understand what creates a competitive advantage. It also provides strong coverage of analytic skills so that students can gauge the effectiveness of the techniques described.

Assessment of Responsible Innovation

Cash Flows and Cash Farming

Rawlinsons Construction Cost Guide 2013

Financing Construction

Office Buildings

Redefining an Illness

Most wars between countries end quickly and at relatively low cost. The few in which high-intensity fighting continues for years bring about a disproportionate amount of death and suffering. What separates these few unusually long and intense wars from the many conflicts that are far less destructive? In

Logics of War, Alex Weisger tests three explanations for a nation’s decision to go to war and continue fighting regardless of the costs. He combines sharp statistical analysis of interstate wars over the past two centuries with nine narrative case studies. He examines both well-known conflicts like World War II and the Persian Gulf War, as well as unfamiliar ones such as the 1864-1870 Paraguayan War (or the War of the Triple Alliance), which proportionally caused more deaths than any other war in modern history. When leaders go to war expecting easy victory, events usually correct their misperceptions quickly and with fairly low casualties, thereby setting the stage for a negotiated agreement. A second explanation involves motives born of domestic politics; as war becomes more intense, however, leaders are increasingly constrained in their ability to continue the fighting. Particularly destructive wars instead arise from mistrust of an opponent’s intentions. Countries that launch preventive wars to forestall expected decline tend to have particularly ambitious war aims that they hold to even when fighting goes poorly. Moreover, in some cases, their opponents interpret the preventive attack as evidence of a dispositional commitment to aggression, resulting in the rejection of any form of negotiation and a demand for unconditional surrender. Weisiger’s treatment of a topic of central concern to scholars of major wars will also be read with great interest by military historians, political psychologists, and sociologists.

A new edition of the market-leading guide to signage and wayfinding design This new edition of Signage and Wayfinding Design: A Complete Guide to Creating Environmental Graphic Design Systems has been fully updated to offer you the latest, most comprehensive coverage of the environmental design process—from research and design development to project execution. Utilizing a cross-disciplinary approach that makes the information relevant to architects, interior designers, landscape architects, graphic designers, and industrial designers alike, the book arms you with the skills needed to apply a standard, proven design process to large and small projects in an efficient and systematic manner. Environmental graphic design is the development of a visually cohesive graphic communication system for a given site within the built environment. Increasingly recognized as a contributor to well-being, safety, and security, EGD also extends and reinforces the brand experience. Signage and Wayfinding Design provides you with Chris Calori’s proven “Signage Pyramid” method, which makes solving complex design problems in a comprehensive signage program easier than ever before. Features full-color design throughout with 100+ new images from real-world projects Provides an in-depth view of design thinking applied to the EGD process Explains the holistic development of sign information, graphic, and hardware systems. Outlines the latest sign material, lighting, graphic application, and digital communication technologies Highlights code and updated ADA considerations If you’re a design professional tasked with communicating meaningful information in the built environment, this vital resource has you covered.

Life-Cycle Cost Models for Green Buildings: With Optimal Green Star Credits illustrates the tools and methods for developing a life-cycle cost model that incorporates developer constraints while maximizing the number of credit points achieved. The book identifies the interdependencies among various credits in the Green Star environmental rating system. Afterwards, life-cycle cost is calculated by considering six main central business districts (CBDs) of Australia. The net present value (NPV) technique is used to calculate life-cycle costs. Further, a sensitivity analysis is also carried out for selected credits to identify the changes to life-cycle cost to the changes in discount rate. Once all the life-cycle cost data is calculated, this book illustrates the development of the proposed model using a Java application which allows users to evaluate each key criterion of green buildings separately. The book is designed to provide ample knowledge of the various options available to get green building certification and the further implications in-terms of life-cycle. Provides cost saving and management advice for keeping a green building project operating on time and budget throughout their life-cycle Expertly explains the various options available for gaining green building certification Allows users to build life-cycle cost models which is unique to the project at hand

This book presents an integrated systems approach to the evaluation, analysis, design, and maintenance of civil engineering systems. Addressing recent concerns about the world’s aging civil infrastructure and its environmental impact, the author makes the case for why any civil infrastructure should be seen as part of a larger whole. He walks readers through all phases of a civil project, from feasibility assessment to construction to operations, explaining how to evaluate tasks and challenges at each phase using a holistic approach. Unique coverage of ethics, legal issues, and management is also included.

Australian Guidebook for Structural Engineers

Innovation, Strategy and Risk in Construction

Turning Serendipity into Capability

Green Roofs and Walls

A Simple Guide to Quantitative and High Frequency Trading

The Twins Survival Guide from Pregnancy Through the First Year

Revised and updated in 2020 The creator of Twiniversity delivers an essential update to her must-have manual to having twins, now with expanded info on twin pregnancy and tandem breastfeeding, and advice on the best gear to help save your sanity. With almost two times as many sets of twins today as there were forty years ago, What to Do When You’re Having Two has quickly become the definitive resource for expectant and new parents of multiples. A mom of fraternal twins and a world-renowned expert on parenting multiples, author Natalie Diaz launched Twiniversity, the world’s leading global resource for twin parenting information and support online. Now, with her expanded edition of What to Do, she includes new information on breastfeeding, gear, sleep, and having two when you already have one, as well as:
• creating your twin birth plan,
• maintaining a realistic sleep schedule,
• managing tandem breastfeeding,
• stocking up on what you’ll need (and knowing what high-tech products are now available and what’s a waste of money), and
• building a special bond with each of your twins. Accessible, informative, and humorous, What to Do When You’re Having Two is the must-have manual for every parent of twins.

This book collates the main research developments around Lean Construction over the past 25 years with contributions from many seminal authors in the field. It takes stock of developments since the publication of Koskela’s (1992) Application of the New Production Philosophy to Construction and, in doing so, challenges current thinking and progress. It also crystallises theoretical conceptualisations and practically situated learning whilst identifying future research challenges, agendas and opportunities for global collaborative actions. The contributors present the development of Lean Construction as a fundamental part of improving construction productivity, quality and delivery of value to clients and users of built infrastructure. In doing so, the book introduces the reader to the foundational principles and theories that have influenced the way we now understand Lean Construction and has provided very useful insights to students, practitioners and researchers on key junctures over the last 25 years. Highlighting the key contemporary developments and using global case study material the chapters demonstrate good practice but also help introduce new thinking to both lay readers and experienced practitioners alike. This book is essential reading for undergraduate and postgraduate students, researchers and practitioners with an interest in Lean Construction and construction management, providing a general understanding of the area, current state of the art knowledge as well as providing an insight into areas for future research.

On a bike trip in Ireland trying to recover from a broken heart, sixteen-year-old Morgan is transformed, not only by the others on the tour, but by her visits to the past, where she is believed to be the legendary half-goddess Morganne, sent to help end a faery curse.

In an increasingly globalised built environment industry, achieving higher levels of integration across organisational and software boundaries can lead to improved economic, social and environmental outcomes. This book is the direct result of a collaborative global network of industry and academic researchers spread across nine countries as part of CIB’s (International Council for Research and Innovation in Building and Construction) Task Group 90 (TG90) Information Integration in Construction (ICON). The book provides a broad view of some of the opportunities and challenges brought by integrating information across organisational and system boundaries in the built environment industry. Chapters cover a large range of topics and are separated into three sections: resources, processes and added value. They provide a much-needed international perspective on a current global evolution in the industry and present leading original research and valuable lessons for researchers, industry practitioners, government clients and policy makers across the industry. Key features include: a broad range of topics that are not covered elsewhere in the literature; contributions from a diverse group of industry research leaders from across the globe; exemplar case studies providing real-world examples of where information integration has been a key factor for success or lack thereof has been at the root cause of failure; an analysis of future priority areas for research and development investment as well as their strategic implications for public and private decision-makers; the book will deliver innovation in best practice methodology for information sharing across disciplines and between the design, construction and asset management sectors.

Rawlinsons Australian Construction Handbook 2022

Australian Cost Management Manual

Lean Construction

Learning from Case Studies

Estimating and Tendering for Construction Work

English Private Law

The volume explains how risk and decision-making analytics can be applied to the wicked problem of protecting infrastructure and society from extreme events. There is increasing research that takes into account the risks associated with the timing and severity of extreme events in engineering to reduce the vulnerability or increase the resiliency of infrastructure. "Engineering for extremes" is defined as measures taken to reduce the vulnerability or increase the resiliency of built infrastructure to climate change, hurricanes, storms, floods, earthquakes, heat waves, fires, and malevolent and abnormal events that include terrorism, gas explosions, vehicle impact and vehicle overload. The book introduces the key concepts needed to assess the economic and social well-being risks, costs and benefits of infrastructure to extreme events. This includes hazard modelling (likelihood and severity), infrastructure vulnerability, resilience or exposure (likelihood and extent of damage), social and economic loss models, risk reduction from protective measures, and decision theory (cost-benefit and utility analyses). Case studies authored by experts from around the world describe the practical aspects of risk assessment when deciding on the most cost-efficient measures to reduce infrastructure vulnerability to extreme events for housing, buildings, bridges, roads, tunnels, pipelines, and electricity infrastructure in the developed and developing worlds.

Estimators need to understand the consequences of entering into a contract, often defined by complex conditions and documents, as well as to appreciate the technical requirements of the project. Estimating and Tendering for Construction Work, 5th edition, explains the job of the estimator through every stage, from early cost studies to the creation of budgets for successful tenders. This new edition reflects recent developments in the field and covers: new tendering and procurement methods the move from basic estimating to cost-planning and the greater emphasis placed on partnering and collaborative working the New Rules of Measurement (NRM1 and 2), and examines ways in which practicing estimators are implementing the guidance emerging technologies such as BIM (Building Information Modelling) and estimating systems which can interact with 3D design models With the majority of projects procured using design-and-build contracts, this edition explains the contractor’s role in setting costs, and design statements, to inform and control the development of a project’s design. Clearly-written and illustrated with examples, notes and technical documentation, this book is ideal for students on construction-related courses at HNC/HND and Degree levels. It is also an important source for associated professions and estimators at the outset of their careers.

This report identifies the costs associated with a range of sustainable solutions for different building types.

Valuing People in Construction provides contemporary perspectives on the ‘glue’ that binds the construction process together; people. The book addresses people issues in the construction industry where behavioural outcomes impact upon business and project performance. The main proposition of the book is that as people continue to lead the completion of construction activities, their health, safety, and well-being should be seen as a priority, and valued by stakeholders. As

employers and employees, the role of people in construction must be to strive for the improvement of individual lives and society. This edited collection, which is the first book to focus specifically on placing value on people in construction, focuses on people at work, gender at work, conditions at work, and respect at work. In addition to an editorial overview, the book presents tested and refined empirical work and case studies by leading construction researchers from Africa, Australia, and Europe. Essential reading for researchers, students and professionals interested in construction management, the sociology of construction, HRM in construction, gender, work and health studies.

Why I Let My Hair Grow Out

Strong Foundations, Later Success

Valuing People in Construction

Rawlinsons Construction Cost Guide 2021

Slavery and the British Country House

Core Concepts and New Frontiers

**Find Practical Solutions to Civil Engineering Design and Cost Management Problems A guide to successfully designing, estimating, and scheduling a civil engineering project, Integrated Design and Cost Management for Civil Engineers shows how practicing professionals can design fit-for-use solutions within established time frames and reliable budgets. This text combines technical compliance with practical solutions in relation to cost planning, estimating, time, and cost control. It incorporates solutions that are technically sound as well as cost effective and time efficient. It focuses on the integration of design and construction based on solid engineering foundations contained within a code of ethics, and navigates engineers through the complete process of project design, pricing, and tendering. Well illustrated The book uses cases studies to illustrate principles and processes. Although they center on Australasia and Southeast Asia, the principles are internationally relevant. The material details procedures that emphasize the correct quantification and planning of works, resulting in reliable cost and time predictions. It also works toward minimizing the risk of losing business through cost blowouts or losing profits through underestimation. This Text Details the Quest for Practical Solutions That: Are cost effective Can be completed within a reasonable timeline Conform to relevant quality controls Are framed within appropriate contract documents Satisfy ethical professional procedures, and Address the client's brief through a structured approach to integrated design and cost management Designed to help civil engineers develop and apply a multitude of skill bases, Integrated Design and Cost Management for Civil Engineers can aid them in maintaining relevancy in appropriate design justifications, guide work tasks, control costs, and structure project timelines. The book is an ideal link between a civil engineering course and practice.**

**Innovation, Strategy and Risk in Construction integrates insights from business and government leaders with contemporary research, to help built environment professionals turn serendipity to their own advantage by building greater innovative and adaptive capacity into their operations. Accessible and full of practical examples, the book argues that traditional business strategies which seek to systematise innovation and eliminate uncertainty need to be balanced with more flexible approaches which acknowledge and harness uncertainty. The missing key to innovation, it is argued, is to turn serendipity into capability. The author proposes a simple model which allows managers to tap into the increasingly dynamic and interconnected nature of the construction industry. Innovation does not occur in isolation within individual firms, but through collaboration. Each stakeholder in the construction industry has a responsibility to drive innovation, and this book will be key reading for consultants, contractors, subcontractors, suppliers and clients, as well as policy makers and all serious students of construction management.**

**"With contributions to a new high-frequency trading section by Manoj Narang"--Dust jacket.**

**In 2007 English Heritage commissioned initial research into links with transatlantic slavery or its abolition amongst families who owned properties now in its care. This was part of the commitment by English Heritage to commemorate the bicentenary of the abolition of the British transatlantic slave trade with work that would make a real difference to our understanding of the historic environment in the longer term. The research findings and those of other scholars and heritage practitioners were presented at the 'Slavery and the British Country House' conference which brought together academics, heritage professionals, country house owners and community researchers from across Britain to explore how country houses might be reconsidered in the light of their slavery linkages and how such links have been and might be presented to visitors. Since then the conference papers have been updated and reworked into a cutting edge volume which represents the most current and comprehensive consideration of slavery and the British country house as yet undertaken.**

**Sources of law, law of persons, law of property. Vol. 1**

**Cost Studies of Buildings**

**Proceedings of the 21st International Symposium on Advancement of Construction Management and Real Estate**

**Introduction to Civil Engineering Systems**

**Warfare in Atlantic Africa, 1500-1800**

**A Guide to Best Practice in Construction**

This book brings together concepts from the building, environmental, behavioural and health sciences to provide an interdisciplinary understanding of office and workplace design. Today, with changes in the world of work and the relentless surge in technology, offices have emerged as the repositories of organizational symbolism, denoted by the spatial design of offices, physical settings and the built environment (architecture, urban locale). Drawing on Euclidian geometry that quantifies space as the distance between two or more points, a body of knowledge on office buildings, the concept of office and office space, and the interrelationships of spatial and behavioural attributes in office design are elucidated. Building and office work-related illnesses, namely sick building syndrome and ailments arising from the indoor environment, and the menace of musculoskeletal disorders are the alarming manifestations that critically affect employee satisfaction, morale and work outcomes. With a focus on office ergonomics, the book brings the discussion on the fundamentals of work design, with emphasis on computer workstation users. Strategic guidance of lighting systems and visual performance in workplaces are directed for better application of ergonomics and improvement in office indoor environment. It discusses the profiles of bioclimatic, indoor air quality, ventilation intervention, lighting and acoustic characteristics in office buildings. Emphasis has been given to the energy performance of buildings, and contemporary perspectives of building sustainability, such as green office building assessment schemes, and national and international building-related standards and codes. Intended for students and professionals from ergonomics, architecture, interior design, as well as construction engineers, health care professionals, and office planners, the book brings a unified overview of the health, safety and environment issues associated with the design of office buildings.

Myalgic encephalomyelitis (ME) and chronic fatigue syndrome (CFS) are serious, debilitating conditions that affect millions of people in the United States and around the world. ME/CFS can cause significant impairment and disability. Despite substantial efforts by researchers to better understand ME/CFS, there is no known cause or effective treatment. Diagnosing the disease remains a challenge, and patients often struggle with their illness for years before an identification is made. Some health care providers have been skeptical about the serious physiological - rather than psychological - nature of the illness. Once diagnosed, patients often complain of receiving hostility from their health care provider as well as being subjected to treatment strategies that exacerbate their symptoms. Beyond Myalgic Encephalomyelitis/Chronic Fatigue Syndrome proposes new diagnostic clinical criteria for ME/CFS and a new term for the illness - systemic exertion intolerance disease (SEID). According to this report, the term myalgic encephalomyelitis does not accurately describe this illness, and the term chronic fatigue syndrome can result in trivialization and stigmatization for patients afflicted with this illness. Beyond Myalgic Encephalomyelitis/Chronic Fatigue Syndrome stresses that SEID is a medical - not a psychiatric or psychological - illness. This report lists the major symptoms of SEID and recommends a diagnostic process. One of the report's most important conclusions is that a thorough history, physical examination, and targeted work-up are necessary and often sufficient for diagnosis. The new criteria will allow a large percentage of undiagnosed patients to receive an accurate diagnosis and appropriate care. Beyond Myalgic Encephalomyelitis/Chronic Fatigue Syndrome will be a valuable resource to promote the prompt diagnosis of patients with this complex, multisystem, and often devastating disorder; enhance public understanding; and provide a firm foundation for future improvements in diagnosis and treatment.

This book presents the proceedings of CRIOCM\_2016, 21st International Conference on Advancement of Construction Management and Real Estate, sharing the latest developments in real estate and construction management around the globe. The conference was organized by the Chinese Research Institute of Construction Management (CRIOCM) working in close collaboration with the University of Hong Kong. Written by international academics and professionals, the proceedings discuss the latest achievements, research findings and advances in frontier disciplines in the field of construction management and real estate. Covering a wide range of topics, including building information modelling, big data, geographic information systems, housing policies, management of infrastructure projects, occupational health and safety, real estate finance and economics, urban planning, and sustainability, the discussions provide valuable insights into the implementation of advanced construction project management and the real estate market in China and abroad. The book is an outstanding reference resource for academics and professionals alike.

Extensively illustrated with photographs and drawings, Living Architecture highlights the most exciting green roof and living wall projects in Australia and New Zealand within an international context. Cities around the world are becoming denser, with greater built form resulting in more hard surfaces and less green space, leaving little room for vegetation or habitat. One way of creating more natural environments within cities is to incorporate green roofs and walls in new buildings or to retrofit them in existing structures. This practice has long been established in Europe and elsewhere, and now Australia and New Zealand have begun to embrace it. The installation of green roofs and walls has many benefits, including the management of stormwater and improved water quality by retaining and filtering rainwater through the plants' soil and root uptake zone; reducing the 'urban heat island effect' in cities; increasing real estate values around green roofs and reducing energy consumption within the interior space by shading, insulation and reducing noise level from outside; and providing biodiversity opportunities via a vertical link between the roof and the ground. This book will appeal to a wide range of readers, from students and practitioners of architecture, landscape architecture, urban planning and ecology, through to members of the community interested in how they can more effectively use the rooftops and walls of their homes or workplaces to increase green open space in the urban environment.

Inside the Black Box

What to Do When You're Having Two

ND Modelling

Building Cost Planning for the Design Team

Living Architecture

Integrating Information in Built Environments

Cost management of all building projects has become increasingly important as clients in the public and private sector demand the highest quality cost planning services with accurate budgeting and cost control. All members of the design team must integrate their activities to ensure that a high quality project is delivered on time and within budget. This book considers building cost planning and cost control from the client and the design team's perspective, where all decisions whether concerned with design, cost, quality, time, value or sustainability are taken as being interrelated. The latest Royal Institute of British Architects (RIBA) Plan of Work and the New Rules of Measurement for Early Stage Estimating and Cost Planning issued by the Royal Institution of Chartered Surveyors (RICS) have been incorporated into this new text. The book follows the building design cost planning process from the crucial inception stages and then through all the design stages to the completion of the technical design, contract documentation and the tender. It provides a template for good cost planning practice. An essential addition to this third edition is the introduction of integrated design and documentation processes captured in building information modelling (BIM), on-line cost databases and computerised methods of cost planning. The integrated approaches are explained and provide vital information and knowledge for practitioners involved in building projects. All stakeholders involved in development and design and client teams in public and private sector policy making and implementation need to understand the new approaches to design management processes and how cost planning and design approaches are adapting to using the new technology in practice. The interactive style, using in-text and review questions makes this ideal for students and practitioners alike in property, architecture, construction economics, construction management, real estate, engineering, facilities management and project management.

History of Phoenicia

Integrated Design and Cost Management for Civil Engineers

Early Childhood Education and Development in Poor Villages of Indonesia

Supply Chain Management

Putting a Price on Sustainability

Health, Safety and Environment