

## Construction Productivity A Practical Guide For Building And Electrical Contractors Strategic Issues In Construction Series

*This Practical Guide to Rock Tunneling fills an important void in the literature for a practical guide to the design and construction of tunnels in rock. Practical Guide to Rock Tunneling takes the reader through all the critical steps of the design and construction for rock tunnels starting from geotechnical site investigations through to construction supervision. The guide provides suggestions and recommendations for practitioners on special topics of laboratory testing, durability of rock and acceptance for unlined water conveyance tunnels, overstraining or deep and long tunnels, risk-based evaluation of excavation methods, contract strategies, and post-construction inspections. Key considerations and lessons learned from selected case projects are presented based on the author's extensive international experience of over 30 years and 1000 km of tunneling for civil, hydropower, and mining infrastructure, including some of the most recognized projects in the world to date. Instead of revisiting all theory and concepts that can be found in other sources, this book contains the hard learned lessons from the author's experience in the field of Rock Tunneling, gathered over 30 years of service. The drive towards environmentally friendly buildings and infrastructure has led to a growing interest in providing design solutions underpinned by the core principles of sustainability to balance economic, social and environmental factors. Design Economics for the Built Environment: Impact of sustainability on project evaluation presents new directions, reflecting the need to recognise the impact of climate change and the importance of sustainability in project evaluation. The aim is to provide a new approach to understanding design economics in the context of the changing policy environment, legislative and regulatory framework, and increasing economic, environmental and social pressure as result of the sustainability agenda. The book follows a structured approach from theories and principles in the earlier chapters, to the practical applications and emerging techniques focusing on value and social, economic and environmental considerations in making design decisions. It starts with the policy context, building on various theories and principles such as, capital cost, value of design and resource-based theories, the new rules of measurement (NRM) to explore cost planning, the relationship between height and costs, key socio-economic and environmental variables for design appraisal, eco-cost/Value ratio (EVR), whole life theory and the treatment of carbon emission as external costs, productivity and efficiency, fiscal drivers and legal framework for carbon reduction, procurement and allocation of risks in contracts. Case studies, practical examples and frameworks throughout reinforce theories and principles and relate them to current practice. The book is essential reading for postgraduate students in architecture, building and quantity surveying and is also a valuable resource for academics, consultants and policy-makers in the built environment.*

*Practical Guide to Construction Contract Surety Claims, Second Edition provides clear guidance on the methods, procedures and case law surrounding the surety process. Whether you represent the surety, principal, or obligee, this one-of-a-kind reference will provide you with the indispensable, practical guidance and reliable tools you need to manage the surety process. Practical Guide to Construction Contract Surety Claims, Second Edition is logically organized around the various types of bonds – payment bond, bid bond, performance bond – as well as the claims that are asserted against those bonds, and the methods of investigation and resolution of those claims. It covers in detail the surety's options for resolving performance bond claims, including: Tender Completion by the obligee Completion by the surety Financing the principal This book also addresses matters that affect the claims handling process, such as: Bankruptcy of the principal Claims for extra-contractual damages Claims by the surety against the principal Indemnity for losses sustained by the surety The interrelationship of the surety and the insurance carriers for the construction project Valuable analysis of case law is included within the discussion of each topic, and the relevant facts of key cases are highlighted where applicable. Bonus Interactive CD-ROM Includes All Forms and Documents This unique CD-ROM contains nearly 150 forms, such as sample agreements and correspondence among the parties, providing the guidance you need to act quickly and protect your client's interests in any situation.*

*CREATE THE BEST CONDITIONS FOR YOUR CHICKENS TODAY Learn why the information in this book is allowing others to create better conditions for their chickens at low cost but with maximum return Chicken coops function to protect chickens from all kinds of vulnerability- be it adverse weather conditions or predators or even the possibility of the chickens wandering away. Since chickens require extreme care for maximum productivity and since this is the main intention of keeping them, it has to be ensured that the construction or the management of these chicken coops at all times satisfies this purpose. This book allows you to do just that and provide the best for your feathered friends. You will learn exceptional methods of taking care of your chickens by providing them with the best coops that is very affordable. Just take a look at what's inside Chicken Coops Overview Mobile Chicken Coops Fixed Chicken Coops Factors that make a Major Difference Building the Perfect Chicken Coops And Much, Much More Get yours today! Take action now on this book so you too can discover this amazingly simple way of taking care of your chickens*

*The Scanlon Way to Improved Productivity*

*A Practical Guide to Successful Construction Projects*

*Managing Productivity in Construction*

*A Virtual Design and Construction Guide for Designers, General Contractors, and MEP Subcontractors*

*Catalog of Holdings*

*Impact of Sustainability on Project Evaluation*

*Construction is the country's single largest manufacturing industry. However, it is a sector that lacks benchmarks against which to gauge performance. This modern thinking intends to provide insight to construction productivity improvement. Taking cues from manufacturing sectors such as computer, automobile and chemical companies, this book will apply the lessons learned to building construction.*

*Supported with a range of pedagogical devices, the book will be of equal value to construction managers and civil engineers, and students with different learning methods.*

*Implement Revit best practices with Dynamo and Power BI to visualize and analyze BIM information Key Features Boost productivity in Revit and apply multiple workflows to work efficiently on BIM projects Optimize your daily work in Revit to perform more tasks in less time Take a hands-on approach to improving your efficiency with useful explanations, which will step-change your productivity Book Description Increasing Autodesk Revit Productivity for BIM Projects takes a hands-on approach to implementing Revit effectively for everyone curious about this new and exciting methodology. Complete with step-by-step explanations of essential concepts and practical examples, this Revit book begins by explaining the principles of productivity in Revit and data management for BIM projects. You'll get to grips with the primary BIM documentation to start a BIM project, including the Contract, Exchange Information Requirements (EIR), and BIM Execution Plan (BEP/ARX). Later, you'll create a Revit template, start a Revit project, and explore the core functionalities of Revit to increase productivity. Once you've built the foundation, you'll learn about Revit plugins and use Dynamo for visual programming and Power BI for analyzing BIM information. By the end of this book, you'll have a solid understanding of Revit as construction and design software, how to increase productivity in Revit, and how to apply multiple workflows in your project to manage BIM. What you will learn Explore the primary BIM documentation to start a BIM Project Set up a Revit project and apply the correct coordinate system to ensure long-term productivity Improve the efficiency of Revit core functionalities that apply to daily activities Use visual programming with Dynamo to boost productivity and manage data in BIM projects Import data from Revit to Power BI and create project dashboards to analyze data Discover the different Revit plugins for improved productivity, visualization, and analysis Implement best practices for modeling in Revit Who this book is for This book is for architects, designers, engineers, modelers, BIM coordinators, and BIM managers interested in learning Autodesk Revit best practices. Increasing Autodesk Revit Productivity for BIM Projects will help you to explore the methodology that combines information management and research for quality inputs when working in Revit.*

*Construction ProductivityA Practical Guide for Building and Electrical Contractors, Ross Publishing*

*Presents construction productivity concepts. This book includes topics such as measuring labor productivity, establishing a field benchmarking program, negotiating loss of labor efficiency, and recommended practices for productivity enhancement. It is suitable for electrical engineers and students.*

*A Practical Guide on Building the Perfect Coops*

*Engineering Management of Capital Projects*

*Extensions of Time and Prolongation Claims*

*The Practical Guide*

*Measurement of Aggregate and Industry-level Productivity Growth*

*Increasing Autodesk Revit Productivity for BIM Projects*

*Construction Project Management offers some of the best project management studies commissioned by ELECTRI International: The Foundation for Electrical Construction that were selected, coordinated, and monitored by some of the most progressive contractors and performed by outstanding scholars from top U.S. universities. Topics include pre-construction planning, early warning signs of project distress, impact of change orders, project sequencing, ideal jobsite inventory levels, tool and material control systems, recommended safety practices, partnering, total quality management, quality assurance, performance evaluation, and contract risk management. All specialty and general contractors will find value in this practical book. The concepts presented will improve your understanding of the main issues affecting construction project management and will provide you with tools and strategies to enhance your company's productivity and profitability.*

*This working handbook provides invaluable assistance for estimating and planning today's more complex urban and suburban heavy construction rehabilitation projects. Means Heavy Construction Handbook is designed to simplify the task by providing relevant information and advice for the problem at hand... whether it's selecting the right number of haulers for a load and haul job, choosing the right method of compaction, or projecting equipment repair and maintenance costs. You'll find a tremendous range of expert advice on every aspect of heavy construction work... including guidance for using RSMeans cost data to prepare highly reliable estimates. FEATURES: Special benefits of this unique Handbook: Explains the business aspects of buying vs. leasing, maintaining, and accounting for equipment. Includes a major section on site evaluation and hazardous wastes. Provides a comprehensive understanding of heavy construction operations and equipment. Explains techniques for hazardous waste site assessment and remediation. Provides guidance for analyzing and estimating heavy construction on a unit price basis. Explains and illustrates the math of heavy construction with formulas and sample calculations – solutions to a variety of productivity and estimating problems. Provides a substantial Appendix of productivity and other reference data for estimating and project planning. Explains successful management and supervision approaches – including guidance for those who oversee the work. This book tackles the complex topic of implementing innovation and the successful application of advanced technology in the construction industry. It provides a practical guide for the transformation of the industry by detailing appropriate and effective implementation methods, required skill sets and structural changes necessary to facilitate the practical and innovative application of technology. The construction industry is behind other industries in its level of innovation and adoption of technology, and is of critical importance to many of today's global challenges, such as climate change, global warming and resource scarcity. There is therefore a need for smarter and more efficient ways of managing available resources. This book elaborates on how the innovative application of technology could offer hope for the construction industry in it's imperative to rise to current and future global challenges. It includes the real-world case studies of innovative projects that go beyond the current state-of-the-art academic research, and have improved productivity, quality and performance in the construction sector. This book provides readers from both industrial and academic backgrounds with a comprehensive guide on transforming the construction industry with the efficient and effective implementation of technologies and modern methods of construction.*

*Provides a practical programme for introducing a total quality scheme into construction companies. Also contains overhead slides that may be copied*

*Labor-based Construction Programs*

*Basic Building and Construction Skills*

*Design Economics for the Built Environment*

*A Practical Guide for Building and Electrical Contractors*

*Construction Productivity*

*A Practical Guide*

*While the construction process still requires traditional skills, the dynamic nature of construction demands of its managers improved understanding of modern business, production and contractual practices. This well established, core undergraduate textbook reflects current best practice in the management of construction projects, with particular emphasis given to supply chains and networks, value and risk management, BIM, ICT, project arrangements, corporate social responsibility, training, health and welfare and environmental sustainability. The overall theme for the Eighth Edition Modern Construction Management are: Drivers for efficiency; lean construction underpinning production management and off-site production methods. Sustainability: reflecting the transition to a low carbon economy. Corporate Social Responsibility: embracing health & safety and employment issues. Modern contractual systems driving effective procurement Building Information Modelling directed towards the improvement of collaboration in construction management systems*

*This manual presents the theoretical foundations to productivity measurement, and discusses implementation and measurement issues.*

*Calculating construction damages can be complex and confusing. Written by recognized experts in the area of construction claims, Aspen Publishersand ' Calculating Construction Damages is a one-of-a-kind resource providing step-by-step guidelines for valuing a claim and calculating damages. Calculating Construction Damages keeps you completely up-to-date with the changes in the construction industry, and provides new and updated coverage on: Reductions in scope through deductive changes The meaning and explanation of acceleration The use of the actual cost method and the total cost method to calculate damages The effectiveness of expanding on productivity analysis. The definition of home office overhead costs and the use of the Eichleay formula. The most recent assessment of attorneysand ' fees on Miller Act claims Only Aspen Publishersand ' Calculating Construction Damages leads you through every step you need to take in order to reach an accurate assessment of construction damages. Complete coverage includes: General Principles of Damage Calculation Labor Costs Equipment and Small Tool Costs; Additional Equipment Costs Material Costs Bond and Insurance Costs Home Office Overhead Calculating Construction Damages is organized by type of damage rather than type of claim. Its clear, mathematical techniques will enable you to value any claim and accurately calculate damages.*

*This title presents the key issues for adopting BIM in construction projects from a pragmatic perspective. It provides an overview of the core ideas and issues distilled from various guidance documents. It focuses primarily on the more complex and important issues of processes, standards and protocols that need to be in place for the successful adoption of BIM in construction projects.*

*Productivity Management*

*A Practical Guide for Students and Professionals*

*A Practical Guide to Disruption and Productivity Loss on Construction and Engineering Projects*

*Searching the Law, 3d Edition*

*Practical Guide to Rock Tunneling*

*Practice Guide with Forms*

*Tired of new software that doesn't seem to work in the field? Ready to get your teams up to speed and productive with the latest tools? The Construction Technology Handbook takes a ground up, no jargon look at technology in the construction industry. From clear, quickly grasped explanations of how popular software actually works to how companies both large and small can efficiently try out and onboard new tools, this book unlocks new ways for construction field teams, firm owners, managers, leaders, and employees to do business. You'll learn about: Simple Frameworks for making sense of all the new options cropping up How software and data work and how they work together to make your job easier and safer What artificial intelligence really is and how it can help all companies today Tools that are just over the horizon that will, one day, make your job just a little bit easier New and practical resources to help you incorporate an attitude of innovation and technology adoption into your workplace Perfect for general contractors and subcontractors, The Construction Technology Handbook also belongs on the bookshelves of construction technology vendors and construction workers who want to better understand the needs of the construction industry and the inner workings of construction technology, respectively.*

*This book provides guidance on delay analysis, particularly in relation to extension of time submissions. It gives readers the information and practical details to be considered in formulating and resolving extension of time submissions and time-related prolongation claims. Useful guidance and recommended good practice is given on all the common delay analysis techniques, and worked examples of extension of time submissions and time-related prolongation claims are included. Written in a practical and user-friendly style, the book includes helpful charts and graphics. It will be useful for construction professionals dealing with extensions of time and delay claims, and for lawyers and others who are involved in the contentious side of the construction and engineering industries. Roger Gibson has over 40 years of planning & programming experience in the construction and engineering industries. During the latter part of his career his has received many appointments as an Expert in time-related disputes.*

*Accounting for Construction follows on from Measuring Construction, edited by the same team. It extends the coverage of some of the material in the first volume and expands the range of related topics to include, inter alia, shadow economies, accounting for informal construction and the treatment of the built environment sector in national accounts. Taken together, the two volumes collate a range of topics that are only addressed, if at all, in occasional academic papers and the publications of bodies such as national statistical offices and the World Bank. Accounting for Construction presents international examples from the UK, Australia and New Zealand and from both academic and professional contributors. This book is essential reading for all researchers and professionals interested in construction economics, construction management, and anyone interested in how the construction industry affects the global economy in ways previously under-represented in the literature.*

*How you can make your construction company more profitable. A 'must read' before you price your next project. Many construction companies fail despite the hard work and knowledge of their managers and owners. Some companies even start well, earning good profits, building successful projects, and the company grows - only for it all to come crashing down, often leaving a mountain of debts behind. So why do construction companies fail? Is it due to bad luck? This book explores important aspects of managing a construction company that impact its success and profitability. Obviously managers should have an understanding of running a business as well as the appropriate technical skills. But, it's usually more than this. The chapters in this book focus on the importance of selecting the right project, how to find projects, tendering correctly, winning the project, delivering the project, avoiding unnecessary costs, increasing revenue, financial and contractual controls, managing the company, the importance of good people, growing the company and ensuring the company has a good reputation. The chapters are set out in an easy to read format, filled with practical tips, which provide a step-by-step guide to growing profits, remaining profitable and running a successful construction company.*

*A Practical Guide to Application*

*A Practical Guide to Estimating and Accounting Methods; Operations/Equipment Requirements; Hazardous Site Evaluat*

*A Practical Guide for Planning and Management*

*Practical Guide to Construction Contract Surety Claims*

*Modern Construction Management*

*The fifth edition of Basic Building and Construction Skills is updated to support the new training package requirements. It is written for apprentices completing Certificate I, II & III in Carpentry and the Certificate I, II & III in Carpentry and Joinery qualifications. Now in full colour, this new edition covers 8 core units of competency. It has been fully updated to reflect present day building practices, standards and legislation. With a greater focus on sustainability, Basic Building and Construction Skills, 5e combines standard industry practice with the newest industry technology, tools and benchmarks. With updated end-of-section worksheets, new content, images and photos, as well as a robust instructor support package, Basic Building and Construction Skills, 5e is an essential resource for providing learners with the underpinning knowledge, skills and awareness necessary for a successful career in building and carpentry. Basic Building and Construction Skills, 5e covers: [] CPCCCA2011A Handle carpentry materials [] CPCCCA2020B Use carpentry tools and equipment [] CPCCCM1012A Work effectively and sustainably in the construction industry [] CPCCCM1013A Plan and organise work [] CPCCCM1014A Conduct workplace communication [] CPCCCM1015A Carry out measurements and calculations [] CPCCCM2001A Read and interpret plans and specifications [] CPCCCHS2001A Apply OHS Requirements, Policies and Procedures in the Construction Industry [] CPCCOHS1001A Work Safely in the Construction Industry All areas of construction litigation are covered in this two-volume set, starting with case analysis, pretrial activities, and special forum issues. The authors continue with an in-depth discussion of the difficult presentation issues for delay and acceleration claims, lost productivity claims, and establishing damages. The final section of the text covers trial and other issues, including direct and cross-examination, appeals, and settlement and releases. Practical examples of, and checklists for, the drafting of many of the key documents used in construction litigation are also included.*

*Based on years of research and practical knowledge, Construction Labor Productivity Management and Methods Improvement provides the tools and information for any contractor to effectively manage labor and improve worker productivity. In a labor-intensive industry such as construction, even small improvements in productivity can significantly improve company profits. This book provides a guide to creating a virtual system of productivity, allowing productivity to be measured, quantified and improved.*

*A tactical guide to successful Virtual Design and Construction project coordination, featuring case studies from leading VDC firms. Virtual Design Coordination (VDC) employs information-rich Building Information Modeling (BIM) to enable specialty designers and contractors to create a single, coordinated set of designs that can prevent cost overruns, avoid schedule delays, and identify issues in the field. Although BIM-based design coordination is widely used in the commercial construction industry, there remains a need for a standardized practice. BIM for Design Coordination formalizes industry best practices and provides structured guidelines to the process. Helping readers gain the benefits of BIM-based design coordination, this practical guide covers areas such as setting up a project for success, model quality impacts on design coordination, carrying out a successful VDC session, and more. Specific guidelines for various project stakeholders are laid out in detail, while real-world examples of project design coordination workflows and templates for BIM Project Execution Plans (PxPs) are provided throughout the text. Written by a leading expert and educator in the field, this book provides a formal set of BIM-based design coordination guidelines that emphasize construction-stage coordination Features real-life case studies that illustrate how leading firms approach design coordination Covers BIM-based design coordination in other industries, such as infrastructure and industrial sectors Presents guidelines for all project stakeholders, including architects, engineers, fabricators, and owners Includes chapters on teaching BIM-based design coordination and the future of the field BIM for Design Coordination: A Virtual Design and Construction Guide for Designers, General Contractors, and MEP Subcontractors is a much-needed resource for general contractors and members of VDC teams, as well as academics, students, and professionals new to BIM-based design coordination.*

*Building Energy Modeling with OpenStudio*

*Calculating Construction Damages*

*BIM for Design Coordination*

*Measurement and Improvement Through Work Study*

*FIDIC Contracts in Asia Pacific*

*JIT Operations and Measurements*

*First published in 1997, this volume joined the debate assessing the potential of the Just-In-Time management philosophy from the manufacturing industry for Singapore 's construction industry by examining the 'off-site' prefabrication of precast concrete components in Singapore, in comparison with traditional management systems. In the wake of the 1991 Strategic Economic Plan of Singapore, which forecasted alarmingly low productivity in the local construction sector, the authors noted that construction in Japan was 35% more productive, whilst Finland was 75% better. Highlighting immense potential for the JIT approach, they explore the JIT philosophy, traditional systems, construction wastes and comparisons between construction and manufacturing.*

*Dealing with such productivity improvement programmes as action learning, quality circles, inter-firm comparisons and business clinics, this book also offers information on the most important areas in which productivity can be improved and on techniques field-tested in developing countries.*

*Disruption of a construction project is of key concern to the contractor as any delay to the project will involve the contractor in financial loss, unless those losses can be recovered from the employer. It is, however, acknowledged that disruption claims in construction are difficult to prove, usually the result of poor or inaccurate project records, but the cost of lost productivity or reduced efficiency to the contractor under these circumstances is very real. Practical Guide to Disruption and Productivity Loss on Construction & Engineering Projects is clearly written to explain the key causes of disruption and productivity loss. Disruption claims rest on proof of causation, so it discusses the project records that are necessary to demonstrate the causes of disruption, lost productivity and reduced efficiency in detail. Quantification of a disruption claim in terms of delay to activities and the associated costs are also fully discussed. With many worked examples throughout the text, this will be an essential book for anyone either preparing or assessing a disruption and loss of productivity claims, including architects, contract administrators, project managers and quantity surveyors as well as contractors, contracts consultants and construction lawyers.*

*Written by experienced and innovative projects lawyer Arant van Wassenaar, this book explains what the critical success factors are for construction projects to be completed on time, within everyone 's budget, to the right quality, with all stakeholders satisfied and without disputes. In so doing, Arant Wassenaar discusses how such projects could be structured, tendered for, executed and completed, and what legal and non-legal mechanisms are available to achieve success in construction projects. Using examples of real projects, A Practical Guide to Successful Construction Projects provides tools for those in leading and managerial positions within the construction industry to change - where necessary - their usual operational methods into methods which are aimed at achieving project success.*

*The Construction Technology Handbook*

*Implementing TQ in the Construction Industry*

*Managing Performance in Construction*

*National Center for Productivity and Quality of Working Life*

*A Practical Guide to Adopting Bim in Construction Projects*

*Building a Successful Construction Company*

*The #1 construction law guide for construction professionals Updated and expanded to reflect the most recent changes in construction law, this practical guide teaches readers the difficult theories, principles, and established rules that regulate the construction business. It addresses the practical steps required to avoid and mitigate risks—whether the project is performed domestically or internationally, or whether it uses a traditional design-bid-build delivery system or one of the many alternative project delivery systems. Smith, Currie & Hancock's Common Sense Construction Law: A Practical Guide for the Construction Professional provides a comprehensive introduction to the important legal topics and questions affecting the construction industry today. This latest edition features: all-new coverage of Electronically Stored Information (ESI) and Integrated Project Delivery (IPD); extended information on the civil False Claims Act; and fully updated references to current AIA, ConsensusDocs, DBIA, and EDC contract documents. Chapters cover the legal context of construction; interpreting a contract; public-private partnerships (P3); design-build and EPC; and international construction contracts. Other topics include: management techniques to limit risks and avoid disputes; proving costs and damages, including for changes and claims for delay and disruption; construction insurance, including general liability, builders risk, professional liability, OCIP, CPIC, and OPIC; bankruptcy; federal government construction contracting; and more. Fully updated with comprehensive coverage of the significant legal topics and questions that affect the construction industry Discusses new project delivery models including Public-Private Partnerships (P3) and Integrated Project Delivery (IPD) Presents new coverage of digital tools and processes including Electronically Stored Information (ESI) Provides extended and updated coverage of the civil False Claims Act as it relates to government construction contracting Filled with checklists, sample forms, and summary "Points to Remember" for each chapter, Smith, Currie & Hancock's Common Sense Construction Law: A Practical Guide for the Construction Professional, Sixth Edition is the perfect resource for construction firm managers, contractors, subcontractors, architects and engineers. It will also greatly benefit students in construction management, civil engineering, and architecture.*

*Widely considered one of the best practical guides to programming, Steve McConnell's original CODE COMPLETE has been helping developers write better software for more than a decade. Now this classic book has been fully updated and revised with leading-edge practices—and hundreds of new code samples—illustrating the art and science of software construction. Capturing the body of knowledge available from research, academia, and everyday commercial practice, McConnell synthesizes the most effective techniques and must-know principles into clear, pragmatic guidance. No matter what your experience level, development environment, or project size, this book will inform and stimulate your thinking—and help you build the highest quality code. Discover the timeless techniques and strategies that help you: Design for minimum complexity and maximum creativity Reap the benefits of collaborative development Apply defensive programming techniques to reduce and flush out errors Exploit opportunities to refactor—or evolve—code, and do it safely Use construction practices that are right-weight for your project Debug problems quickly and effectively Resolve critical construction issues early and correctly Build quality into the beginning, middle, and end of your project*

*This textbook teaches the fundamentals of building energy modeling and analysis using open source example applications built with the US DOE's OpenStudio modeling platform and EnergyPlus simulation engine. Designed by researchers at US National Laboratories to support a new generation of high performance buildings, EnergyPlus and OpenStudio are revolutionizing how building energy modeling is taught in universities and applied by professional architects and engineers around the world. The authors, all researchers at National Renewable Energy Laboratory and members of the OpenStudio software development team, present modeling concepts using open source software that may be generally applied using a variety of software tools commonly used by design professionals. The book also discusses modeling process automation in the context of OpenStudio Measures—small self-contained scripts that can transform energy models and their data—to save time and effort. They illustrate key concepts through a sophisticated example problem that evolves in complexity throughout the book. The text also examines advanced topics including daylighting, parametric analysis, uncertainty analysis, design optimization, and model calibration. Building Energy Modeling with OpenStudio teaches students to become sophisticated modelers rather than simply proficient software users. It supports undergraduate and graduate building energy courses in Architecture, and in Mechanical, Civil, Architectural, and Sustainability Engineering.*

*FIDIC contracts are the most widely used contracts for international construction around the world and are used in many different jurisdictions, both common law and civil law. For any construction project, the General Conditions of Contract published by FIDIC need to be supplemented by Particular Conditions that specify the specific requirements of that project subject to the relevant laws. FIDIC Contracts in Asia Pacific provides readers with detailed guidance and resources for the preparation of the Particular Conditions that will comply with the requirements of the applicable laws for a number of the jurisdictions in which FIDIC contracts are used. The laws that apply to the governing law of the contract, construction works and dispute resolution in each jurisdiction are identified. This book offers chapters on the FIDIC Conditions of Contract for Underground Works, and the perspective of a bilateral aid agency on the use of FIDIC contracts. Each jurisdiction features an outline of its construction industry and information on the impact of Covid-19 on both the execution of construction projects and the operation of construction contracts. This book is essential reading for construction professionals, lawyers and students of construction law using FIDIC contracts.*

*Construction Disputes*

*Infrastructure Development and Construction Management*

*Smith, Currie & Hancock's Common Sense Construction Law*

*Code Complete*

*Accounting for Construction*

*Means Heavy Construction Handbook*

*This is a comprehensive book on infrastructure development and construction management. It is written keeping in mind the curricula of construction management programmes in India and abroad. It covers infrastructure development, the construction industry in India,*

*financial analysis of the real estate industry in India, economic analysis of projects, tendering and bidding, contracts and contract management, FIDIC conditions of contract, construction disputes and claims, arbitration, conciliation and dispute resolution, international construction project exports and identifying, analysing and managing construction project risk. Thus, this book covers most of the construction management activities that are carried out at different stages of a construction project. This is an essential book for students*

*of construction management, construction professionals, academicians and researchers.*

*Measuring Productivity - OECD Manual Measurement of Aggregate and Industry-level Productivity Growth*

*Innovation in Construction*

*Frameworks: Productivity, Cost and Performance*

*A Practical Handbook*

*Construction Delays*

*A Practical Guide for the Construction Professional*