

# BUILDING & CONSTRUCTION

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NEW

4TH EDITION

## Understanding the Building Regulations

**Simon Polley**, BRCS (Building Control) Ltd, Chelmsford, UK

*Praise for previous editions:*

**'Covers all the requirements of the Building Regulations as we know them today. It is clear and concise in its explanations ... A good book.'** – *Clerk of Works Journal*

**'A clear and concise introduction to the Building Regulations and Approved Documents ... Up-to-date, well presented and should benefit the student and any person wishing to find out about the Building Regulations and how to make an application to their Local Council.'** – *ASI Journal*

Do you need a concise, jargon-free and compact guide to the UK building regulations?

Simon Polley boils down the regulations to their basic features, explaining the core principles behind them. Easy to read and light enough to carry around with you, this is the ideal introduction to a vital part of your remit as a building control officer, architect or surveyor.

Updated with the 2008 changes to Parts L and F and revisions to Part B and illustrated with cartoons.

August 2008: 234x156: 312pp  
Pb: 978-0-415-45272-4: **£19.99**  
eBook: 978-0-203-93796-9



## Fundamental Building Technology

**Andrew Charlett**, Nottingham Trent University, UK

All students undertaking Level One undergraduate programmes in construction need to develop an understanding of basic building techniques. This up-to-date and dependable textbook takes the reader through the essential skills, concepts and methods of constructing a simple house to provide a solid grounding in building techniques.

Working through each element of a building project and incorporating practical considerations from materials selection to implementation, this is the ideal handbook for all students who need a hands-on and thorough guide. Self-assessment exercises at key points underline the main concepts and make this text ideal for distance or independent learners as well as university students.

**Selected Contents:** 1. Introduction to Building Technology 2. Site Investigation and the Type of Ground 3. Excavation 4. Foundations 5. Concrete 6. Single Storey Basements 7. Bricks and Blocks 8. External Wall Construction 9. Bonding and Openings 10. Timber 11. Ground Floors 12. Upper Floors 13. Flat Roof Construction 14. Flat Roof Coverings 15. Pitched Roof Construction 16. Pitched Roof Coverings 17. Timber Frame and Steel Frame House Construction 18. Windows and Glazing 19. Doors 20. Stairs 21. Plasters and Plasterboard 22. Internal Walls and Partitions 23. Internal Finishes 24. External Wall Finishes

2006: 246x174: 288pp  
Hb: 978-0-415-38623-4: **£67.50**  
Pb: 978-0-415-38624-1: **£21.99**  
eBook: 978-0-203-96609-9



3RD EDITION

## Understanding Building Failures

James Douglas, Heriot-Watt University, Edinburgh, UK and  
Bill Ransom

**'Provides well-structured content for students and practitioners; it is easily readable, written in good English and, finally, it has achieved its objective, namely, to provide a thorough knowledge for understanding building failures.'**

– *Building Engineer*

This third edition of the classic textbook provides a solid introduction to the study of defects in buildings and, subsequently, to good practice, conservation and repair. With new material, this is an excellent practitioner and student reference book.

**Selected Contents:** 1. Introduction to Building Pathology 2. Building Diagnostics 3. Deterioration Mechanisms 4. Durability and Service Life of Building Materials 5. Moisture 6. Foundations 7. Floors, Floor Finishes and DPMs 8. Walls and DPCs 9. Cladding 10. Doors and Windows 11. Roofs 12. Services 13. Failure Patterns and Control 14. Summary and Conclusion

2007: 234x156: 352pp

Hb: 978-0-415-37082-0: **£75.00**

Pb: 978-0-415-37083-7: **£27.50**

eBook: 978-0-203-03014-1



## Hazards and the Built Environment

Attaining Built-in Resilience

Edited by **Lee Boshier**, Loughborough University, UK

What kinds of structural and non-structural alterations can be made to protect buildings from large-scale disasters?

How can we reduce the threat of these disasters, as well as the damage they cause?

Presenting seven guiding principles, drawn from a broad range of disciplines and approaches, this book tackles the difficult questions about what can be done to attain built-in resilience. With contributions from many renowned experts and upcoming researchers in the fields concerned, it comprehensively assesses the wide range of issues faced by practitioners. Whether you're studying construction management, researching hazard resilience issues or working on construction projects in hazardous regions, this book is for you.

Lee Boshier is a research fellow in the Department of Civil and Building Engineering at Loughborough University, UK. He is a Fellow of the Royal Geographical Society, and a Member of the Institute of Civil Defence and Disaster Studies.

May 2008: 234x156: 400pp

Hb: 978-0-415-42729-6: **£90.00**

Pb: 978-0-415-42730-2: **£39.99**

eBook: 978-0-203-93872-0



## Seeing and Touching Structural Concepts

Tianjian Ji and Adrian Bell, both at University of Manchester, UK

The pioneering website [www.structuralconcepts.org](http://www.structuralconcepts.org), by Tianjian Ji and Adrian Bell, goes back to basics and explains in detail the basic principles of structural concepts and how they relate to the real world.

Following on from and expanding upon the website, comes this book. Essential for the civil engineering student, it examines the concepts in closer detail with formulae and technical terminology, while remaining grounded in the website's practical approach. With hundreds of photographs and diagrams, you are encouraged to visualize each concept in turn and to understand how it applies to every day life.

However much you may come to rely on software packages to do a lot of the technical calculation, it will always be vital to understand what does and doesn't work and why. With its recipe format and straight-forward explanations, this will be your companion through your engineering degree and early years of practice.

**Selected Contents:** Preface. **Statics** 1. Equilibrium 2. Centre of Mass 3. Effect of Different Cross Sections 4. Bending 5. Shear and Torsion 6. Stress Distribution 7. Span and Deflection 8. Direct Force Paths 9. Smaller Internal Forces 10. Buckling 11. Prestress 12. Horizontal Movements of Frame Structures Induced by Vertical Loads **Dynamics** 13. Energy Exchange 14. Pendulum 15. Free Vibration 16. Resonance 17. Damping in Structures 18. Vibration Reduction 19. Human Body Models in Structural Vibration

May 2008: 246x174: 288pp  
Hb: 978-0-415-39773-5: **£75.00**  
Pb: 978-0-415-39774-2: **£29.99**  
eBook: 978-0-203-96079-0

Students studying construction management and related subjects need to have a broad understanding of the major aspects of controlling the building processes. This group of three textbooks systematically cover the field, and can be taken singly or together.



**NEW**

## Business Organisation for Construction

Chris March

With a user-friendly style and a strong theoretical base, *Business Organisation for Construction* provides readers with some of the tools required to skillfully and successfully operate a business in today's construction industry. Arranged into three sections, Chris March explains:

- strategy and vision, business finance and the market place
- the organization, recruitment, support, motivation and leadership of people
- communication and negotiation.

With a wealth of practical construction industry experience, Chris March provides evidence to enlighten the theory, with illustrations and tables to clarify. Available singly or as part of a set, this is a valuable resource for construction students.

**Selected Contents:** 1. Pioneers of Management Theory 2. Organisations 3. The Legal Establishment of Businesses 4. Strategic Planning 5. Marketing 6. Leadership and Team Building 7. Team or Group Working 8. Human Resources Management 9. Managing Stress 10. Risk Analysis and Management 11. Communications

February 2009: 234x156: 224pp  
Hb: 978-0-415-37009-7: **£85.00**  
Pb: 978-0-415-37010-3: **£24.99**  
eBook: 978-0-203-92802-8

**NEW**

## Finance and Control for Construction

Chris March

Drawing on a wealth of practical experience, both in the construction industry and teaching students, Chris March presents this study of construction management and the major aspects of controlling the building process.

Covering the stages from the client's initiation, to the final handover of the building, Chris March includes evidence from those currently working in the industry, and covers the key industry requirements: knowing that in today's market place, those entering the field must be aware of how projects are financed and controlled, and to financially run and maintain a building.

This book is written with a down-to-earth approach, with evidence supporting theories and principles, and is a book that students of construction management and related subjects need if they wish to succeed in the field.

**Selected Contents:** 1. The Main Participants 2. Sources of Finance 3. Valuations and Development Appraisal 4. Introduction to Design Economics 5. Approximate Estimating 6. Whole Life Costing (WLC) and Life Cycle Analysis (LCA) 7. Value Management or Engineering 8. Procurement Methods and Types of Contract 9. Standard Method of Measurement and Bills of Quantities 10. Estimating and Tendering Procedures 11. Bidding Strategy 12. Purchasing 13. Post Control Cost Control 14. Interim Valuations, Claims and Variations 15. Post Contract Cost Systems

February 2009: 234x156: 240pp  
 Hb: 978-0-415-37114-8: **£85.00**  
 Pb: 978-0-415-37115-5: **£24.99**  
 eBook: 978-0-203-92804-2

**NEW**

## Operations Management for Construction

Chris March

Focusing on construction sites and challenging operations to run, Chris March explores issues such as the setting up of the site, the deciding of the methodology of construction, and the sequence of work and resourcing. As changing and increasing regulations affect the way sites are managed, he also considers the issues and methods of successful administering, safety, quality and environment. Finally, the contractor's responsibility to the environment, including relationships with third parties, selection of materials, waste management and sustainability are discussed.

Chris March has a wealth of practical experience in the construction industry, as well as considerable experience of teaching, which he uses to support the theory and principles set out in the book.

**Selected Contents:** 1. Site Organisation 2. Contract Planning 3. Work Study 4. Health and Safety 5. Waste Management 6. Stock Control and Management 7. Supply Chain Management 8. Quality Management

February 2009: 234x156: 240pp  
 Hb: 978-0-415-37112-4: **£85.00**  
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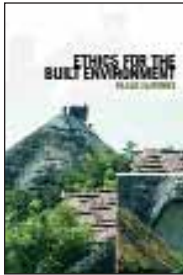


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**NEW**

## Ethics for the Built Environment

Peter Fewings, University of the West of England, Bristol, UK

Much closer relationships are being formed in the built environment and cultural changes in procurement methods are taking place. A need has grown to re-examine the ethical frameworks required to sustain collaborative trust and transparency.

This book looks at how people develop their personal values and tries to set up a model for making effective ethical decisions within the built environment. It exposes areas of weakness that may inhibit better relationships in projects and suggests decision making frameworks.

It provides a holistic view of the ethical framework and illustrates good practice by using case studies and questions for resolving dilemmas. It will be invaluable for professional institutions, students, young practitioners in all stages of the development cycle from planning, property management, design, project management and facilities management, contractors and clients.

**Selected Contents: Part 1: Principles and Issues** Introduction 1. Development of an Ethical Framework 2. Dilemmas and Decision Making 3. Corporate Social Responsibility 4. Professional Codes 5. Human Resource Ethics 6. Health and Safety 7. Planning 8. Sustainability 9. Trust and Relationships 10. Bribery and Corruption 11. Good Faith  
**Part 2: Industry Survey Case Studies** 12. Corporate Social Responsibility 13. Partnering 14. Collusion 15. Project Agreements vs. False Employment 16. Health and Safety 17. Planning 18. Training 19. Quality 20. Sustainable Contracting 21. Trust and Relationships 22. Making it Work

September 2008: 234x156: 400pp  
 Hb: 978-0-415-42982-5: **£90.00**  
 Pb: 978-0-415-42983-2: **£29.99**  
 eBook: 978-0-203-92690-1

**NEW**

## Corporate Social Responsibility in the Construction Industry

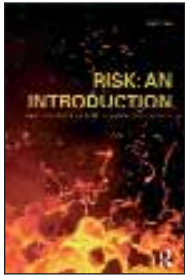
Edited by Michael Murray, University of Strathclyde, Glasgow, UK and Andrew Dainty, Loughborough University, UK

The construction process, right through from planning and design to use and demolition, has a major impact on society. Traditionally, concern has been focused on its environmental impact and the quest for sustainability, but this has now extended into the wider remit of Corporate Social Responsibility (CSR). Essentially, this means that businesses must act (voluntarily) in a socially ethical manner by developing a policy that encompasses the core principles enshrined by CSR.

A unique presentation on a topic of emerging importance, *Corporate Social Responsibility in the Construction Industry* is essential reading for all built environment undergraduate and post-graduate courses, as well as CEOs and senior managers within construction businesses who may be about to embark on developing a CSR strategy.

**Selected Contents:** 1. Introduction 2. The Evolution of Corporate Social Responsibility in Construction 3. A Business Case for Developing a CSR Policy 4. The Role of Construction in Developing Countries 5. Community Interaction 6. Corruption in the UK 7. International Corruption 8. Cartels 9. Sustainable Development 10. The Eco-Building Movement 11. UK House-Building 12. Occupational Health and Safety 13. USA 14. South Africa 15. Hong Kong and Asia Pacific 16. Australia

August 2008: 234x156: 432pp  
 Hb: 978-0-415-36207-8: **£80.00**  
 Pb: 978-0-415-36208-5: **£29.99**  
 eBook: 978-0-203-01233-8

**NEW**

## Risk: An Introduction

The Concepts of Risk, Danger and Chance

**Bernardus Ale**, Delft University, the Netherlands

Investments, global warming and crossing the road – risk is a factor embedded in our everyday lives but do we really understand what it means, how it is quantified and how decisions are made? In six chapters Bernardus Ale explains the concepts, methods and procedures for risk analysis and in doing so provides an introductory understanding of risk perception, assessment and management.

Aided by over seventy illustrations, Ale casts light on the often overlooked basics of this fascinating field, making this an essential text for students at undergraduate and postgraduate level as well as policy and decision-making professionals.

Developed from the Safety Science or Risk Science course taught at Delft University, this highly respected author has a lifetime of knowledge and experience in the study of risk.

**Selected Contents:** **Part 1: Introduction** Why We Take Risks. The Essence of Risk. Safety Science. Security and Safety. Technological Risk. Scientific Definition **Part 2: Cause and Consequence** Probability. Systems and Interfaces **Part 3: The System** The Intestines. Using the System. Lifecycle. Mitigation. Quantified Risk Assessment **Part 4: The Development of an Accident** Management of Risk. Unsafe Acts and Unsafe Design **Part 5: Occupational Accidents** Aviation. Human Error Probability. No Data But Still Knowledge **Part 6: Taking Risks** Risk Metrics. Risk Acceptability and Criteria. Cost-Benefit Analysis. Setting Standards. Framing. Nuclear Waste. Discourse. Risky Decisions

April 2009: 234x156: 160pp  
Hb: 978-0-415-49089-4: **£75.00**  
Pb: 978-0-415-49090-0: **£19.99**  
eBook: 978-0-203-87912-2

**3RD EDITION**

## Project Management Demystified

**Geoff Reiss**, The Program Management Group, UK

**'If you are new or relatively new to project management and you plan to have one book ... this is the one you should have.'** – *Martin Barnes, President of the Association of Project Management, UK*

**'A user friendly approach ... The linkages with human resources material and financial resources makes for added value.'** – *Chris Collins, University of Huddersfield, UK*

**'For managers who want to understand the key elements of setting up a project and ensuring on-time completion, the book is a straightforward guide and very readable.'** – *Lecturer, Norwich City College, UK*

This is an indispensable book for professionals and students working in or studying project management in business, engineering or the public sector.

This third edition contains expanded sections on programme management, portfolio management, and the public sector. An entirely new chapter covers the evaluation, analysis and management of risks and issues. A much expanded section explores the rise and utilization of methodologies like *Prince2*.

**Selected Contents:** 1. Setting the Stage 2. Getting the Words in the Right Order 3. Nine Steps to a Successful Project 4. The Scope of the Project and its Objectives 5. Project Planning 6. A Fly on the Wall 7. Resource Management 8. Progress Monitoring and Control 9. Governance and Methodologies 10. Advanced Critical-Path Topics 11. The People Issues 12. Programme Management 13. Issue and Risk Management 14. Terminology. Appendix 1: Sources of Additional Information  
2007: 234x156: 224pp  
Pb: 978-0-415-42163-8: **£21.99**  
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## Construction Project Management

An Integrated Approach

Peter Fewings

**'The complexity of the subject matter has at last been reinforced in an informative document with a large helping of common sense ... written in a comprehensive and well structured manner.'** – *Building Engineer*

Presenting a new approach to project management in construction and engineering based on the author's practical experiences. It considers all aspects of project management with particular emphasis on increasing efficiency and communication at all stages while reducing costs, time and risk.

2005: 234x156: 432pp

Hb: 978-0-415-35905-4: **£80.00**

Pb: 978-0-415-35906-1: **£29.99**

eBook: 978-0-203-00698-6



## Implementing IT in Construction

James Sommerville and Nigel Craig, both at Glasgow Caledonian University, UK

Contrary to stereotype, the construction industry has embraced IT with some vigour. Computers are used effectively across the sector and this use is increasing. A range of new issues have emerged in consequence.

This practical book draws on direct industrial experience and examines the role of IT within a range of enterprises operating in the construction and property industry. Emphasis is given to the human side of IT and the effects of the implementation of IT systems on them. The functionality of the IT systems is considered, as is the design brief and the operation of the applications. Case reviews of a range of applications are discussed and issues arising from their implementation are explored. Pitfalls, benefits and experience shapers are reviewed and presented systematically so the reader can consider these in the light of their own experience.

Outlining key drivers for advanced students and for professionals who may have to face these issues in the future, *Implementing IT in Construction* clearly presents the value of IT implementation and the benefits of a number of IT applications.

2006: 234x156: 214pp

Hb: 978-0-415-37051-6: **£95.00**

Pb: 978-0-415-37052-3: **£36.99**

eBook: 978-0-203-03039-4



## Procurement Systems

A Cross-Industry Project Management Perspective

**Derek Walker**, Royal Melbourne Institute of Technology, Australia and **Steve Rowlinson**, University of Hong Kong

Innovative and novel, this book extends its coverage of the topic well beyond the conventional themes of project solicitation and proposal evaluation. Using extensive experience gathered over five years of teaching postgraduate courses, Derek Walker and Steve Rowlinson build on *Procurement Systems: A Guide to Best Practice in Construction* to present a comprehensive and coherent volume that is invaluable to the wider project management community.

**Selected Contents:** 1. Introduction and Procurement Fundamentals 2. Project Types and Their Procurement Needs 3. Stakeholders and the Supply Chain 4. Business Ethics and Corporate Citizenship 5. The Role of Business Strategy in PM Procurement 6. Performance Measures and Project Procurement 7. E-Business and Project Procurement 8. Procurement Innovation and Organizational Learning 9. Culture and its Impact Upon Project Procurement 10. Project Procurement and the Quest for Talent 11. Case Study – Developing a Centre of Excellence (CoE) 12. Trust, Commitment and Mutual Goals in Australia Construction Industry Project Alliances 13. Innovation Management in Project Alliances 14. Business Transformation Through an Innovative Alliance

2007: 234x156: 480pp

Hb: 978-0-415-41605-4: **£100.00**

Pb: 978-0-415-41606-1: **£45.00**

eBook: 978-0-203-93969-7



## Communication in Construction

Theory and Practice

**Andrew Dainty, David Moore and Michael Murray**

**'It would be difficult to put another team together with comparable knowledge ... In all, this is a solid publication which will hopefully inspire further interest and scientific enquiry into this area.'** – *Christopher Gorse, International Journal of Architectural Engineering and Design Management*

**'Provides a broad account of communication in construction. Students of construction related subjects will find the book useful, both as a reference and as a source of inspiration for future research.'** – *Construction Management and Economics*

**'An excellent commentary on construction communication.'** – *Lecturer, University of Bolton, UK*

This book offers practical guidance on possible solutions to communication problems, featuring a number of examples related to the construction industry.

2005: 234x156: 272pp

Hb: 978-0-415-32722-0: **£95.00**

Pb: 978-0-415-32723-7: **£29.99**

eBook: 978-0-203-35864-1



**2ND EDITION**

## Risk Management in Projects

**Martin Loosemore, John Raftery, Charles Reilly and David Higgin**

This second edition of the original practical and straightforward text retains the easy-to-read format, but has been expanded to encompass the entire risk management process and to give a fuller presentation of how risk is generally perceived.

Two new chapters cover risk identification and risk response, and the chapters on risk analysis have been completely reorganized. There is also greater emphasis on the theory behind the principles, and an expanded bibliography is given to guide an exploration of the subject in greater detail. The book demystifies risk management by presenting the subject in simple and practical terms, free of technical jargon, and case studies are used extensively to enliven the text and to illustrate the concepts discussed.

**Selected Contents:** 1. Risk and Uncertainty in Projects 2. Risk and Opportunity 3. Risk and Opportunity Analysis 4. Perception of Risk 5. Risk Response, Crisis Management and Recovery 6. Developing and Implementing a Successful Risk and Opportunity Management System. References. Appendix A: Risk Management Maturity Level Checklist. Appendix B: A Checklist of Common Risks and Opportunities in Construction Projects

2005: 234x156: 288pp  
Hb: 978-0-415-26055-8: **£80.00**  
Pb: 978-0-415-26056-5: **£23.99**  
eBook: 978-0-203-96370-8



**NEW**

**2ND EDITION**

## Construction Economics

A New Approach

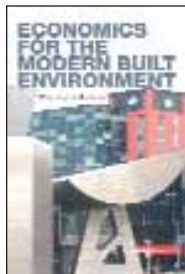
**Danny Myers**, University of the West of England, UK  
and University of Bath, UK

*Construction Economics* provides students with the principles and concepts of economic theory and relates this to the construction industry, and the new approach views economics as central to government initiatives in sustainable construction.

This updated second edition has been expanded to cover the latest debates on the private finance initiative, value management, off-site manufacture, the credit crunch, the 2008 OFT investigation into contractors colluding, and sustainable construction.

**Selected Contents:** 1. An Introduction to the Basic Concepts **Part A: Effective Use of Resources** 2. Economic Systems for Resource Allocation 3. The Market Mechanism 4. The Theory of Demand 5. The Theory of Supply 6. Clients and Contractors 7. Costs of the Construction Firm 8. Types of Market Structure in the Construction Industry **Part B: Protection and Enhancement of the Environment** 9. Markets for Green Buildings and Infrastructure 10. Market Failure and Government Intervention 11. Environmental Economics **Part C: Economic Growth that Meets the Needs of Everyone** 12. Managing the Macroeconomy 13. The Economy and Construction: Measurement and Manipulation 14. The Business Case: Inflation and Expectations 15. Sustainable Construction. Glossary

September 2008: 246x174: 336pp  
Hb: 978-0-415-46228-0: **£90.00**  
Pb: 978-0-415-46229-7: **£25.99**

**NEW**

## Economics for the Modern Built Environment

Edited by **Les Ruddock**, University of Salford, UK

Drawing on the work of the CIB Task Group on Macroeconomics for Construction, this book discusses mesoeconomic and macroeconomic models and methodologies in construction economics and is suited for graduate students and researchers.

**Selected Contents:** 1. The Changing Nature of the Built Environment 2. Defining the Sector: Assessing the Value of the Built Environment in the Macroeconomy 3. The Economics of Architecture and Urban Design 4. Market Dynamics Between Real Estate, Investment, Development and Construction 5. Structures Investment and Economic Growth 6. The Economics of Maintenance 7. Demand Versus Supply Side Strategies – In Low-Income Housing 8. Business, Building and Property Cycles 9. Impacts of Construction and Property Markets on the Macroeconomy 10. Impacts of Fiscal, Monetary and Regulatory Policies 11. Market Modelling and Forecasting 12. Interrelationships of the Building and Property Sectors 13. The Changing Nature of the Built Environment 14. Globalisation and Contagion in the World Economy 15. Theories of Investment in Property 16. Trends and Cycles in Property Investment 17. Regulatory Issues 18. Construction Activity and Economic Development 19. Aggregate GDP and Construction Value-Added: Quantifying the Relationship 20. Real Estate Cycles 21. Input-Output Economics in the Built Environment 22. Construction and Property Markets in a Changing World Economy

October 2008: 234x156: 296pp  
 Hb: 978-0-415-45424-7: **£95.00**  
 Pb: 978-0-415-45425-4: **£35.00**  
 eBook: 978-0-203-93857-7



## Construction Cost Management

Learning from Case Studies

**Keith Potts**, University of Wolverhampton, UK

Using a combination of worked examples and case studies, this book examines how projects go over-cost, what lessons can be learned from past examples and what approaches have successfully been employed. Example case studies include:

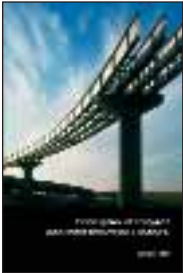
- The Scottish Parliament
- Wembley Stadium
- Heathrow Terminal 5.

If you're studying Surveying or Construction Management, or starting out as a Construction Cost Manager and need to plan or assess construction projects then this is the book for you.

**Selected Contents:** 1. Introduction and Overview 2. Reports and Recommendations 3. Selecting the Consultants and Contractors 4. Pre-Contract Cost Management 5. Cost Management on PFI Projects 6. Contractor's Estimating and Tendering 7. Value Management 8. Risk Management 9. Whole Life Costing 10. Organisational Methods (Part 1) 11. Organisational Methods (Part 2) 12. Payment Systems and Contract Administration 13. Contractors' Cost Control and Monitoring Procedures 14. Change Management – Valuing Variations 15. Claims Management 16. The NEC Engineering and Construction Contract 17. FIDIC Standard Forms of International Construction Contract 18. Case Study: Heathrow Terminal 5

April 2008: 246x174: 320pp  
 Hb: 978-0-415-44286-2: **£75.00**  
 Pb: 978-0-415-44287-9: **£28.99**  
 eBook: 978-0-203-93301-5





## Principles of Project and Infrastructure Finance

Willie Tan, National University of Singapore

Current books on project finance tend to be non-technical and are either procedural or rely heavily on case studies. In contrast, this textbook provides a more analytical perspective, without a loss of pragmatism.

*Principles of Project and Infrastructure Finance* is written for senior undergraduates, graduate students and practitioners who wish to know how major projects, such as residential and infrastructural developments, are financed. The approach is intuitive, yet rigorous, making the book highly readable. Case studies are used to illustrate integration as well as to underscore the pragmatic slant.

**Selected Contents:** 1. Introduction 2. Time Value of Money 3. Organizations and Projects 4. Corporate Finance 1 5. Corporate Finance 2 6. Project Development 7. Social Projects 8. Characteristics of Project Finance 9. Risk Management Framework 10. Risk, Insurance, and Bonds 11. Cash Flow Risks 12. Financial Risks 13. Agreements, Contracts, and Guarantees 14. Case Study 1: Power Projects 15. Case Study 2: Airport Projects 16. Case Study 3: Office Projects 17. Case Study 4: Chemical Storage Projects

2007: 234x156: 296pp

Hb: 978-0-415-41576-7: **£90.00**

Pb: 978-0-415-41577-4: **£31.50**

eBook: 978-0-203-96250-3



4TH EDITION

## Construction Contracts

Law and Management

John Murdoch and Will Hughes, both at University of Reading, UK

The fourth edition of this unparalleled text has been thoroughly revised to provide the most up-to-date and comprehensive coverage of the legislation, administration and management of construction contracts.

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David Chappell, David Chappell Consultancy Ltd, Wakefield, UK

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Each contract has been restructured and all the clause numbers have changed together with some terminology. Virtually all the clauses have been reworded and updated in line with recent case law.

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July 2009: 246x174: 800pp

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**Heinrich Kuttruff**, Institute of Technical Acoustics, Aachen University, Germany

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- sound insulation in buildings and noise control
- underwater sound and ultrasound.

Scientifically thorough, but with mathematics kept to a minimum, *Acoustics* is the perfect introduction to acoustics for students at any level of mechanical, electrical or civil engineering courses and an accessible resource for architects, musicians or sound engineers requiring a technical understanding of acoustics and their applications.

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Colin Hansen

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Undergraduate and graduate students should find this a very suitable book, as will Occupational Health and Safety engineers and consultants in noise control.

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This book is an invaluable guide for HND and degree level students of building services engineering, as well as building, built environment, building engineering and architecture courses.

**Selected Contents:** 1. Thermal Comfort and Assessment 2. Heat Conduction 3. Heat Convection 4. Heat Radiation 5. Measurement of Fluid Flow 6. Characteristics of Laminar and Turbulent Flow 7. Mass Transfer of Fluids in Pipes, Ducts and Channels 8. Natural Ventilation in Buildings 9. Regimes of Fluid Flow in Heat Exchangers.

Appendix 1: Verifying the Form of and Equation by Dimensional Analysis.

Appendix 2: Solving Problems by Dimensional Analysis. Appendix 3: Renewable Energy Systems. Appendix 4: Towards Sustainable Building Engineering

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This second edition includes two new chapters on current regulations and environmental impact of building services. It closely follows recent benchmarking published by CIBSE and the Defra energy efficiency Best Practice Programme and covers Unit 18 in the new HND in building services engineering.

**Selected Contents:** 1. Economics of Space Heating Plant 2. Estimating Energy Consumption: Continuous Space Heating 3. Intermittent Heating 4. Hot Water Supply 5. Estimating Energy Consumption: Air Conditioning 6. Performance Indicators 7. Energy Conservation Strategies 8. Cost Benefit Analysis 9. Energy Audits 10. Monitoring and Targeting 11. Regulations Relating to Greenhouse Gas Emissions 12. Trends in Building Services. Appendices

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4TH EDITION

## Design of Electrical Services for Buildings

Barrie Rigby

*Design of Electrical Services for Buildings* provides a basic grounding for students and graduates in the field. It covers methods of wiring, schemes of distribution and protection for lighting and power installations. Systems such as alarms and standby supplies are also covered. Each method is described in detail and examples of calculations are given.

For this fourth edition, the coverage of wiring and electrical regulations have been brought fully up to date, and the practical information has been revised.

**Selected Contents:** 1. Accessories 2. Cable 3. Wiring 4. Cable Rating 5. Circuits 6. Distribution 7. Lighting 8. Power 9. Protection 10. Fire Alarms 11. Call and Computer Systems, Telephone and Public Address Systems 12. Reduced Voltage Systems 13. Communal and Closed Circuit TV Systems 14. Lightning Protection 15. Emergency Supplies 16. Lifts, Escalators and Paternosters 17. Regulations 18. Design Example. Bibliography. Index

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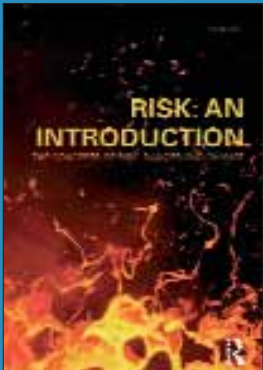
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