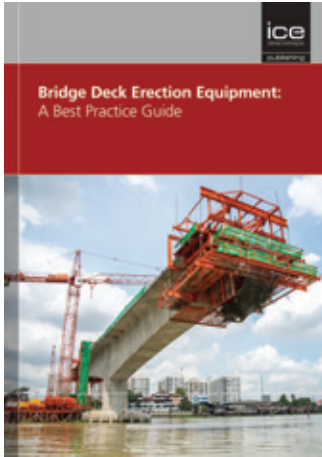


New titles in Structures & Buildings



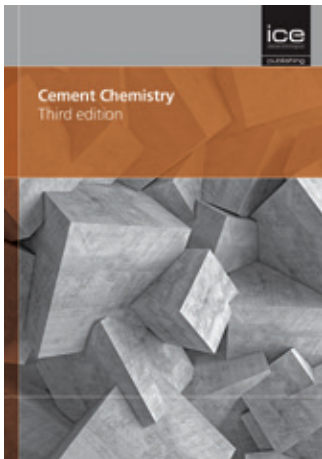
Bridge Deck Erection Equipment: A Best Practice Guide

Edited by Steve Harridge

The modern bridge industry is moving to mechanized solutions in order to accelerate construction and reduce cost. The level of sophistication of the new-generation bridge construction machines requires a broad overview and a technically competent culture. An increased level of knowledge related to these modern construction processes would save lives and would facilitate better decision-making processes.

Bridge Deck Erection Equipment is an international best practice guide covering the procurement, definition, design, checking, fabrication and operation of items of specialist bridge construction machinery, mostly used for the building of concrete bridge decks.

978-0-7277-6193-4 / 360pp / December 2017 / Hardbound / £100.00 / \$XX.00



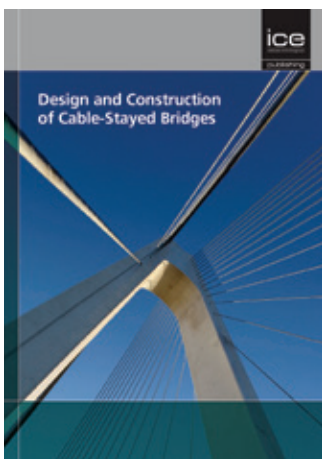
Cement Chemistry, 3rd edition

Ian Richardson and H F W Taylor (deceased)

This third edition of *Cement Chemistry* addresses the chemistry and materials science of the principal silicate and aluminate cements used in building and civil engineering. Emphasis throughout is on the underlying science.

The book deals more specifically with the chemistry of Portland cement manufacture and the nature of the resulting product, the processes that occur when this product is mixed with water, the nature of the hardened material, the chemistry of other types of hydraulic cement, and chemical and microstructural aspects of concrete, including processes that affect its durability.

978-0-7277-4179-0 / 832pp / July 2017 / Hardbound / £100.00 / \$175.00



Design and Construction of Cable-stayed Bridges

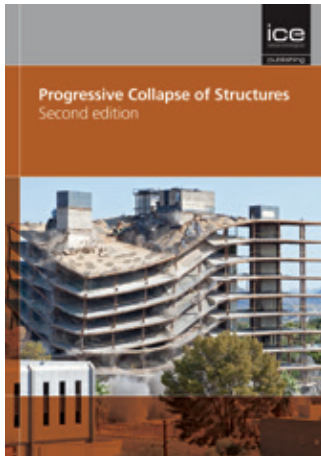
Nigel Hewson and Andrew Hodgkinson

Offering state of the art, practical guidance on the design and construction of cable stayed bridges, *Design and Construction of Cable-Stayed Bridges* includes the history of cable-stayed bridges and the range of different structure types that are commonly called cable-stayed bridges. The analysis of cable-stayed bridges and the vibration and aerodynamic behaviour is covered, as will Eurocodes and reference to other applicable design standards.

Written by UK engineers currently involved with the design and construction of high profile cable-stayed bridge projects, this book provides a comprehensive reference document for bridge engineers who are involved with, or wish to become involved with cable-stayed bridge design, construction or maintenance.

978-0-7277-5767-8 / 440pp / January 2017 / Hardbound / £95.00 / \$170.00

New titles in Structures & Buildings



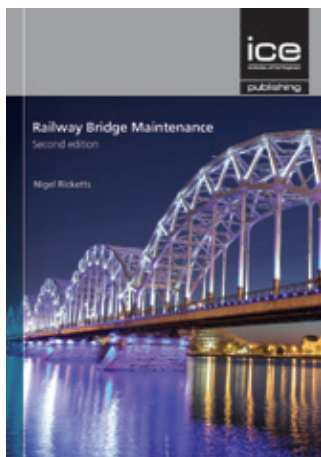
Progressive Collapse of Structures, 2nd edition

Uwe Starossek

This book gives engineers the practical, systematic framework they need to anticipate the risk of progressive collapse and apply this knowledge to design and assessment procedures. It contains a comprehensive introduction to the different types of progressive collapse with more illustrations than the first edition, and includes an overview of the current standards and guidelines for design against progressive collapse.

There have been important developments in research and code - building codes are becoming more explicit in their progressive collapse requirements. The new edition intends to better address the demand for guidance by comprehensively referring to code requirements and by including more application examples and graphical material. A chapter on 'Applications' with newly added calculation examples illustrates progressive collapse design procedures, as described by different codes.

978-0-7277-6168-2 / 248pp / September 2017 / Hardbound / £70.00 / \$110.00



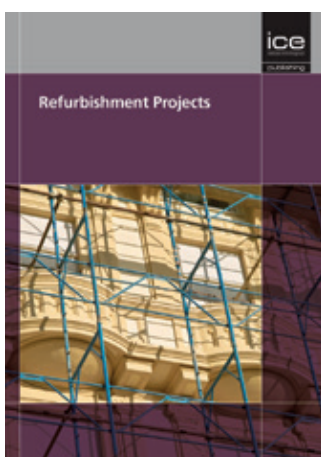
Railway Bridge Maintenance, 2nd edition

Nigel Ricketts

Railway Bridge Maintenance, 2nd edition is an updated edition of a 'classic text' valued by transport engineers both in the UK and overseas to support modern methods of asset management specifically related to existing railway bridges.

Whereas there are books available on bridge design and construction, there is no complementary work dealing with the problems of maintenance. The objective of the book is to treat the subject of maintenance in a comprehensive manner that will be useful to a wide spectrum of personnel, ranging from senior trades-men supervisors to chief designers and engineers. In addition, it should be helpful to managements and operators of transport systems.

978-0-7277-6065-4 / 240pp / June 2017 / Hardbound / £65.00 / \$110.00



Refurbishment Projects

David Oloke

Growing urban populations and rises in land and house prices have seen the rise in the alteration and refurbishment of buildings. The number of extensions, loft conversions, basement constructions and other retrofit projects has grown as the need to make old stock more energy efficient increases together with the requirements of sustainable development.

The planning of alteration and refurbishment construction projects involves complex activities such as collecting and analysing various sources of information related to the existing structure. *Refurbishment Projects* also considers end-of-lifecycle operations and the safety risks of potentially unknown conditions of the building.

978-0-7277-6159-0 / 264pp / July 2017 / Paperbound / £50.00 / \$85.00

New titles in Structures & Buildings



Seismic Design of Foundations

Subhamoy Bhattacharya, Domenico Lombardi, Rolando Orense

Seismic Design of Foundations provides essential knowledge and information on the seismic design of foundations. With easy-to-understand explanations of the basic concepts, the authors incorporate recent research outputs and post-earthquake reconnaissance studies worldwide with practical applications. To supplement the discussion generated from the case studies, the authors provide worked examples to round out the concepts presented. Innovations and new findings offer background information behind the codes of practice in various parts of the world and the lessons learned from recent large-scale earthquakes and research outputs.

Seismic Design of Foundations presents state-of-the-art information suitable for postgraduate civil engineering and structural engineering students and researchers working in the field of seismic design.

978-0-7277-6166-8 / 376pp / February 2018 / Hardbound / £85.00 / \$75.00



Shell Structures in Civil and Mechanical Engineering, 2nd edition

Alphose Zingoni

Shell Structures in Civil and Mechanical Engineering comprehensively describes the theories governing the membrane and bending behaviour of thin elastic shells, and then applies these theories to obtain practical solutions for various types of shell structures. By conducting parametric studies and discussing the design implications of results obtained from analytical solutions, *Shell Structures* clearly explains the implications of varying shell parameters during the course of design.

The new edition explores the evolution over the past two decades of comprehensive design codes for shells, versatile numerical methods (such as the finite-element method) and modelling of the non-linear behaviour of shells, such as large-deformation response, instability and buckling.

978-0-7277-6028-9 / 498pp / August 2017 / Paperbound / £75.00 / \$130.00



Tension Structures: Form and Behaviour, 2nd edition

Wanda J. Lewis

This new updated edition will present numerical modelling of the structural form and behaviour of tension structures, and also address certain misconceptions related to their design.

The book is aimed at researchers studying tension structures, final year engineering and architectural students working on projects, practising engineers (civil engineers and structural designers), and architects. The book attracted interest from scientists developing computational methodologies for non-linear problems in areas other than civil engineering.

978-0-7277-6173-6 / 184pp / December 2017 / Hardbound / £60.00 / \$100.00

New titles in Structures & Buildings



Underground Space

Han Admiraal and Antonia Cornaro

Underground Space is a broad overview of the concept of underground space development investigating the issues that are associated with the sustainable development of urban underground space. This book shows the benefits, the possibilities and world-class examples of underground space development and how that translates into sustainable urbanisation.

The book is intended for civil engineers, urban planners, urban designers and architects. It would also appeal to public policy makers and those involved with the future of urban development. It will provide multi-disciplinary information and aims to support a cross-disciplinary dialogue on the subject.

978-0-7277-6145-3 / 232pp / July 2017 / Hardbound / £70.00 / \$125.00



Recommendations for the Inspection, Maintenance and Management of Car Park Structures, 2nd edition

ICE, Chris Whapples and Leo McKibbins

A new edition of the bestselling publication, this is a technical guidance book providing updated best practice on a "life care plan" to ensure maintained and safe car park structures, to owners and operators of car parks and their engineering consultants.

This unique book has been thoroughly revised for the second edition, including updated Health and Safety legislation, a review of the Life Care Plan to incorporate a risk managed approach, full coverage of all new key topics such as electrical services, CCTV, barriers and edge protection, fixings and public safety issues.

978-0-7277-5839-2 / 156pp / August 2017 / Paperbound / £55.00 / \$95.00

Bestsellers in Structures & Buildings

Bridge Construction Equipment

Marco Rosignoli

978-0-7277-5808-8 / 496pp / 2013 / Hardbound / £92.00 / \$147.00



Bridge Launching, 2nd edition

Marco Rosignoli

978-0-7277-5997-9 / 376pp / 2014 / Hardbound / £86.00 / \$142.00



Bridge Monitoring (CSIC Series)

Campbell R. Middleton, Paul R.A. Fidler and Paul J. Vardanega

978-0-7277-6059-3 / 136pp / 2016 / Hardbound / £65.00 / \$110.00

Conceptual Structural Design: Bridging the Gap between Architects and Engineers, 2nd edition

Olga Popovic Larsen

978-0-7277-6110-1 / 240pp / 2016 / Paperbound / £40.00 / \$70.00

Bestsellers in Structures & Buildings

Concrete Bridge Strengthening and Repair

Ian Kennedy-Reid

978-0-7277-3603-1 / 128pp / 2009 / Paperbound / £64.00 / \$102.00



Concrete Durability

Marios Nicou Soutsos (ed)

978-0-7277-3517-1 / 600pp / 2009 / Hardbound / £176.00 / \$277.00



Earthquake Design Practice for Buildings, 3rd edition

Edmund Dwight Booth

978-0-7277-5794-4 / 370pp / 2014 / Hardbound / £70.00 / \$122.00



ICE manual of bridge engineering, 2nd edition

Gerard Parke and Nigel Hewson

978-0-7277-3452-5 / 760pp / 2008 / Hardbound / £232.00 / \$377.00



ICE manual of construction materials: Metals and alloys

Wei Sha

978-0-7277-4063-2 / 120pp / 2010 / Paperbound / £37.00 / \$69.50



ICE manual of construction materials: polymers and polymer fibre composites

Leonard Hollaway (ed)

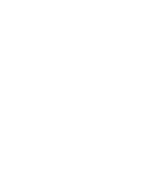
978-0-7277-4120-2 / 148pp / 2010 / Paperbound / £37.00 / \$69.50



ICE manual of structural design: buildings

John Bull (ed)

978-0-7277-4144-8 / 148pp / 2012 / Hardbound / £158.00 / \$277.00



Movable Bridge Design

Charles Birnstiel, William Bowden and George Foerster

978-0-7277-5804-0 / 432pp / 2015 / Hardbound / £104.00 / \$163.50

Stadium and Arena Design (Stadium Engineering, 2nd edition)

Edited by Peter Culley

978-0-7277-5790-6 / 264pp / 2015 / Hardbound / £100.00 / \$168.50

Steel-concrete Composite Bridges, 2nd edition

David Collings

978-0-7277-5810-1 / 270pp / 2013 / Hardbound / £86.00 / \$136.00

Structural Analysis (ICE Textbook series)

Mikus Cirulis and Phil Wicks

978-0-7277-5984-9 / 264pp / 2015 / Paperbound / £31.00 / \$56.50
