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NEW

ICE Manual of Geotechnical Engineering

J. Burland, T. Chapman, H. Skinner and M. Brown

Many civil engineers leave university with some knowledge of applied mechanics, geology and some soil and rock mechanics but often a limited grounding in geotechnical engineering. A good geotechnical engineer needs to appreciate the balance between theoretical principles, practical experience and the uncertainties present when dealing with the ground in its natural state.

The *ICE Manual of Geotechnical Engineering* is intended to address this need by delivering an authoritative and comprehensive reference providing the core geotechnical engineering principles, practical techniques, and the major questions engineers should keep in mind when dealing with real-world engineering challenges – all within a consistently coherent framework.

Read more at www.icemanuals.com

978 07277 3652 9 / 1400pp / Hardbound / 2 volumes / 2011 / £200.00

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978 07277 5707 4 / 650pp / Hardbound / 2011 / £110.00

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978 07277 5709 8 / 750pp / Hardbound / 2011 / £110.00



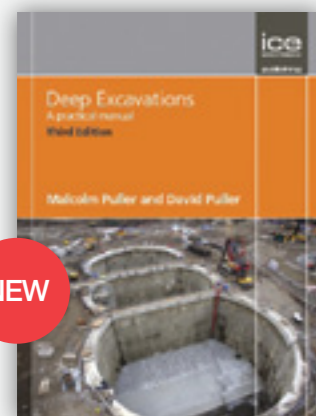
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Site Investigation in Construction Series, 2nd edition UK Specification for Ground Investigation

Site Investigation Steering Group

This Specification includes associated Schedules and a Bill of Quantities, and is intended for general application to ground investigation work. The Bill of Quantities is presented as an introduction and a comprehensive list of work items, which relates closely to the Specification items. This Specification may be used in conjunction with any suitable contractual agreement between the procurer and ground investigation contractor. The involvement of a Geotechnical Adviser or Geotechnical Specialist is considered essential in the planning, procurement and supervision of ground investigation work.

978 07277 3506 5 / 224pp / Paperbound / 2011 / £45.00



NEW

Deep Excavations, 3rd edition A practical manual

M. Puller and D. Puller

Deep Excavations: A practical manual assembles the practical rules and details for the efficient and economical execution of deep excavations. The third edition uses international case examples, including the Nicholas Highway, Singapore and the Silken Hotel, Aldwych, alongside the experience of both design and construction from published work and practical experience to do this. Each chapter is fully updated to current practice, including the latest contractor safety measures, construction regulations (including manslaughter) and causes and avoidance of injury and fatality.

New material has been included on: basic reasons behind deep excavations; typical design calculations for basement excavation support and for cofferdams; underpinning and ground freezing in design of soil support; risk of deep cofferdams in soft ground; CTRL cut and cover; and Well formulae. Further details are also included on the computer programs available – FLAC, ABACUS, etc.

978 07277 4117 2 / 592pp / Hardbound / 2011 / £100.00



NEW

Earthworks, 2nd edition A guide

P. Nowak

Nothing can be built without some excavation and transfer of soil (or rock) from one part of a site to another and this makes earthworks the most common product of civil engineering operations. Although normally seen as major structures, such as earth fill dams or large highways or railway embankments, the majority of earthworks are connected with minor civil works and building construction. Whatever the type of work, the principles are the same. *Earthworks: A Guide* establishes the essential theoretical background to the compaction process and describes some commonly available fills, including industrial materials, both from the construction and the in-service viewpoints. The guide continues with a description of design construction control and monitoring procedures for earth fills, noting that design and control in earthworks are intimately linked.

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Handbook of Tunnel Fire Safety, 2nd edition

A. Beard

Following catastrophic tunnel fires that have occurred worldwide, it has become essential to gain a much better understanding of all aspects of tunnel fire safety, from basic science to acceptable risk and the law. The fundamental principles which have emerged from research and investigation in this field, form the bed-rock for decision making on how tunnels may be designed, or up-graded and operated in an acceptable way.

Spanning the spectrum of current knowledge available in the field of tunnel fire safety, *Handbook of Tunnel Fire Safety* covers a diverse range of topics.

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978 07277 4153 0 / 640pp / Hardbound / 2011 / £95.00



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S. Kumar Shukla

This is a book to which students (at all levels) and engineers in search of novel approaches to solutions for civil engineering problems can refer. The topics presented are based on major field application areas for geosynthetics in civil engineering. The straightforward and concise presentation of topics in the book will be helpful for those with limited experience of geosynthetics, while more experienced users will easily be able to find information relating to solutions to specific engineering problems.

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