

1. Record Nr.	UNINA9910145425703321
Titolo	Structural foundation designers' manual [[electronic resource] /] / W.G. Curtin ... [et al.]
Pubbl/distr/stampa	Malden, MA, : Blackwell Pub., 2006
ISBN	1-281-31933-3 9786611319335 0-470-76236-5 0-470-77506-8 0-470-77758-3
Edizione	[2nd ed. /]
Descrizione fisica	1 online resource (390 p.)
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Disciplina	624.15
Soggetti	Foundations Structural design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Preface; Preface to First Edition; The Book's Structure and What It Is About; Acknowledgements; Authors' Biographies; Notation; PART 1:APPROACH AND FIRST CONSIDERATIONS; 1 Principles of Foundation Design; 1.1 Introduction; 1.2 Foundation safety criteria; 1.3 Bearing capacity; 1.3.1 Introduction; 1.3.2 Bearing capacity; 1.3.3 Presumed bearing value; 1.3.4 Allowable bearing pressure; 1.3.5 Non-vertical loading; 1.4 Settlement; 1.5 Limit state philosophy; 1.5.1 Working stress design; 1.5.2 Limit state design; 1.6 Interaction of superstructure and soil; 1.6.1 Example 1:Three pinned arch 1.6.2 Example 2:Vierendeel superstructure1.6.3 Example 3:Prestressed brick diaphragm wall; 1.6.4 Example 4:Composite deep beams; 1.6.5 Example 5:Buoyancy raft; 1.7 Foundation types; 1.7.1 Pad foundations; 1.7.2 Strip footings; 1.7.3 Raft foundations; 1.7.4 Piled foundations; 1.8 Ground treatment (geotechnical processes); 1.9 Changes of soil properties during excavation; 1.10 Post-construction foundation failure; 1.11 Practical considerations; 1.11.1 Example 6:Excavation in waterlogged ground; 1.11.2 Example 7:Variability of ground conditions

1.11.3 Example 8:Reliability of the soils investigation1.11.4 Example 9: Deterioration of ground exposed by excavation; 1.11.5 Example 10: Effect of new foundation on existing structure; 1.12 Design procedures; 1.13 References; 2 Soil Mechanics,Lab Testing and Geology; A:Soil mechanics; 2.1 Introduction to soil mechanics; 2.2 Pressure distribution through ground; 2.3 Bearing capacity; 2.3.1 Introduction to bearing capacity; 2.3.2 Main variables affecting bearing capacity; 2.3.3 Bearing capacity and bearing pressure; 2.3.4 Determination of ultimate bearing capacity
2.3.5 Safe bearing capacity - cohesionless soils2.3.6 Safe bearing capacity - cohesive soils; 2.3.7 Safe bearing capacity combined soils; 2.4 Settlement; 2.4.1 Introduction to settlement; 2.4.2 Void ratio; 2.4.3 Consolidation test; 2.4.4 Coefficient of volume compressibility; 2.4.5 Magnitude and rate of settlement; 2.4.6 Settlement calculations; 2.5 Allowable bearing pressure; 2.6 Conclusions; B:Laboratory testing; 2.7 Introduction to laboratory testing; 2.8 Classification (disturbed sample tests); 2.8.1 Particle size and distribution; 2.8.2 Density; 2.8.3 Liquidity and plasticity
2.8.4 General2.9 Undisturbed sample testing; 2.9.1 Moisture content; 2.9.2 Shear strength; 2.9.3 Consolidation tests (oedometer apparatus); 2.9.4 Permeability tests; 2.9.5 Chemical tests; 2.10 Summary of tests; 2.11 Analysis of results; 2.12 Final observations on testing; C:Geology; 2.13 Introduction to geology; 2.14 Formation of rock types; 2.15 Weathering of rocks; 2.16 Agents of weathering; 2.16.1 Temperature; 2.16.2 Water; 2.16.3 Wind; 2.16.4 Glaciation; 2.17 Earth movement; 2.17.1 Folds,fractures and faults; 2.17.2 Dip and strike; 2.17.3 Jointing; 2.17.4 Drift
2.18 Errors in borehole interpretation

Sommario/riassunto

This manual for civil and structural engineers aims to simplify as much as possible a complex subject which is often treated too theoretically, by explaining in a practical way how to provide uncomplicated, buildable and economical foundations. It explains simply, clearly and with numerous worked examples how economic foundation design is achieved. It deals with both straightforward and difficult sites, following the process through site investigation, foundation selection and, finally, design. The book: includes chapters on many aspects of found
