

1. Record Nr.	UNINA9910453270603321
Autore	Emmitt Stephen
Titolo	Barry's introduction to construction of buildings // Stephen Emmitt, Christopher A. Gorse ; Andy Meaden, cover design
Pubbl/distr/stampa	Chichester, England : , : Wiley Blackwell, , 2014 ©2014
ISBN	1-118-85654-6 1-118-85668-6
Edizione	[Third edition.]
Descrizione fisica	1 online resource (810 p.)
Disciplina	690
Soggetti	Building Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Title page; Copyright page; Contents; Preface; Acknowledgements; About the Companion Website; 1: Introduction; 1.1 The function and performance of buildings; Function; Performance; Quality; Economics; 1.2 Environmental factors; Climate change; Environmental impact; Energy efficiency and environmental performance; 1.3 General principles of construction; Loadbearing construction; Framed construction; Design and constructability; Prefabrication and off-site production; An alternative approach; 1.4 Regulations and approvals; Planning consent; Building control and building regulations 1.5 Making choices and sources of informationSources of information; A note of caution; 2: Site Analysis and Set-Up; 2.1 Function of the site analysis; Sequence of activities; 2.2 The 'desk-top' study; Information required; Typical sources of information; 2.3 Site reconnaissance; The visual inspection of the site; Identification and physical location of services; Surveys; 2.4 Soil investigations; Foundation design and subsoil examination; Trial pits; Boreholes; Depth and location of exploratory investigation; Ground and soil tests; 2.5 The performance appraisal; Structure of the report 2.6 Site set-up and securitySite set-up; Security and safety; Levelling and setting out; Temporary weather protection; Cold weather working;

3: Groundwork and Foundations; 3.1 Functional requirements; Strength and stability; 3.2 Bedrock and soil types; Rocks; Soil; 3.3 Ground movement; Volume change; Frost heave; Made up ground; Unstable ground; Precast pile and beam foundation systems; 3.4 Foundation construction; Concrete; Strip foundations; Short-bored pile foundations; Pad foundations; Raft foundations; Foundations on sloping sites; Alternative approaches
3.5 Site preparation and drainage Contaminants; Site drainage; Laying drains; Support for foundation trenches; 4: Floors; 4.1 Functional requirements; Strength; Stability; Resistance to weather and ground moisture; Durability and freedom from maintenance; Fire safety; Resistance to the passage of heat; Resistance to the passage of sound; 4.2 Ground supported concrete slab; Hardcore; Damp-proof membrane; Materials used for the dpm; 4.3 Suspended concrete floor slabs; T-beam method; Floor surface; Floor screeds; 4.4 Suspended timber ground floors; Sleeper walls; Ventilation; Wall plate Floor joists Floor surface; Thermal insulation; 4.5 Resistance to the passage of heat; Achieving insulation values in different types of floor construction; 4.6 Reinforced concrete upper floors; Precast 'T'-beam and infill block floor; Hollow beam floor units; Reinforced concrete and clay block floor; Monolithic reinforced concrete floor; Steel 'rib-deck' concrete floors; Functional requirements specific to concrete floors; 4.7 Timber upper floors; Floor joists; Functional requirements specific to timber upper floors; Party floors; 5: Walls; 5.1 Functional requirements Resistance to weather and ground moisture

Sommario/riassunto

Robin Barry's Construction of Buildings was first published in 1958 in 5 volumes, rapidly becoming a standard text on construction. In its current 2 volume format Barry remains hugely popular with both students and lecturers of construction and related disciplines. The third edition of Barry's Introduction to Construction of Buildings provides the basic material you will need to understand the construction process for the majority of low rise buildings. Construction technology is explained and illustrated through the key functional and performance requirements for the main elem
