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Edizione	[2nd ed. 2017.]
Descrizione fisica	1 online resource (XVIII, 680 p. 428 illus.)
Disciplina	624.1834
Soggetti	Building materials Structural materials Buildings—Design and construction Building Construction Engineering, Architectural Ceramics Glass Composites (Materials) Composite materials Building Materials Structural Materials Building Construction and Design Ceramics, Glass, Composites, Natural Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Reinforced Concrete Technology -- Rectangular Beams and OneWay Slabs -- Special Topics in Flexure -- Shear in Reinforced Concrete Beams -- Columns -- Floor Systems -- Foundations and Earth Supporting Walls -- Formworks in Reinforced Concrete -- Overview of Pre-stressed Concrete -- Metric System in Reinforced Concrete Design and Construction.
Sommario/riassunto	This revised, fully updated second edition covers the analysis, design, and construction of reinforced concrete structures from a real-world perspective. It examines different reinforced concrete elements such as

slabs, beams, columns, foundations, basement and retaining walls and pre-stressed concrete incorporating the most up-to-date edition of the American Concrete Institute Code (ACI 318-14) requirements for the design of concrete structures. It includes a chapter on metric system in reinforced concrete design and construction. A new chapter on the design of formworks has been added which is of great value to students in the construction engineering programs along with practicing engineers and architects. This second edition also includes a new appendix with color images illustrating various concrete construction practices, and well-designed buildings. The ACI 318-14 constitutes the most extensive reorganization of the code in the past 40 years. References to the various sections of the ACI 318-14 are provided throughout the book to facilitate its use by students and professionals. Aimed at architecture, building construction, and undergraduate engineering students, the scope of concepts in this volume emphasize simplified and practical methods in the analysis and design of reinforced concrete. This is distinct from advanced, graduate engineering texts, where treatment of the subject centers around the theoretical and mathematical aspects of design. As in the first edition, this book adopts a step-by-step approach to solving analysis and design problems in reinforced concrete. Using a highly graphical and interactive approach in its use of detailed images and self-experimentation exercises, "Concrete Structures, Second Edition," is tailored to the most practical questions and fundamental concepts of design of structures in reinforced concrete. The text stands as an ideal learning resource for civil engineering, building construction, and architecture students as well as a valuable reference for concrete structural design professionals in practice.
