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The Reinforced Concrete Design Handbook provides assistance to professionals engaged in the design of reinforced concrete buildings and related structures. This edition is a major revision that brings it up-to-date with the approach and provisions of Building Code Requirements for Structural Concrete (ACI 318-14). The layout and look of the Handbook have also been updated. The Reinforced Concrete Design Handbook now provides dozens of design examples of various reinforced concrete members, such as one- and two-way slabs, beams, columns, walls, diaphragms, footings, and retaining walls. For consistency, many of the numerical examples are based on a fictitious seven-story reinforced concrete building. There are also many additional design examples not related to the design of the members in the seven-story building that illustrate various ACI 318-14 requirements. Each example starts with a problem statement, then provides a design solution in a three column format—code provision reference, short discussion, and a detailed design. A certain code provision is highlighted in a yellow background. The design examples are organized into three sections: Foundations, Columns, and Walls. The Handbook is published by the American Concrete Institute (ACI) and is developed by ACI staff engineers under the auspices of the ACI Technical Activities Committee (TAC). To provide immediate oversight and guidance for this project, TAC appointed three content editors: Andrew Taylor, Trey Hamilton III, and Antonio Nanni. Their reviews and suggestions improved this publication and are appreciated. TAC also appreciates the support of Dirk Bondy and Kenneth Bondy who provided free software to analyze and design the post-tensioned beam example, in addition to valuable comments and suggestions. Thanks also go to JoAnn Browning, David DeFazio, Anindya Dutta, Charles Dolan, Matthew Huslig, Ronald Klemencic, James Lai, Steven McCabe, Mike Mota, Hani Nassif, Jose Pincheira, David Rogowski, and Siamak Sattar, who reviewed one or more of the chapters. Keywords: anchoring to concrete; beams; columns; cracking; deflection; diaphragm; durability; flexural strength; footings; frames; pile caps; post-tensioning; punching shear; retaining wall; shear strength; seismic; slabs; splicing; stiffness; structural analysis; structural systems; strut-and-tie; walls. 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