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# **BUILDING DESIGN AND CONSTRUCTION HANDBOOK**

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**Frederick S. Merritt (Deceased)** Editor

**Jonathan T. Ricketts** Editor

**Sixth Edition**

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**Frederick S. Merritt** (deceased) was a consulting engineer for many years, with experience in building and bridge design, structural analysis, and construction management. A Fellow of the American Society of Civil Engineers and a Senior Member of ASTM, he was a former senior editor of *Engineering News-Record* and an author/editor of many books, including McGraw-Hill's *Standard Handbook for Civil Engineers* and *Structural Steel Designer's Handbook*.

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# PREFACE

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The sixth edition of the *Building Design and Construction Handbook* maintains the original objectives of previous editions which gained widespread acceptance among users. These objectives are to provide in a single volume a compendium of the best of the current knowledge and practices in building design and construction.

This information would be of greatest use to those who have to make decisions affecting the selection of engineering materials and construction methods. Emphasis is placed on fundamental principles and practical applications, with special attention to simplified procedures. Frequent reference is made to other sources where additional authoritative information may be obtained, such as architectural and engineering societies, manufacturers associations, and the Internet. An extensive index is provided to assist the reader in locating topics within the book.

Many new contributors and sections have been added in this edition to provide the reader with the latest developments and knowledge in the building industry. These developments include the expansion of data technology and communication systems within the building system, revisions to wind and seismic loadings, and an expansion of the information on fire sprinkler systems. To present the necessary information in a single volume, obsolete and less-important information in the earlier editions has been deleted.

The editor is very grateful to the contributors, not only for their care, skill, and knowledge used in preparing the sections, but also for their considerable sacrifices of personal time to prepare the sections.

*Jonathan T. Ricketts*

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