

REINFORCED MASONRY ENGINEERING HANDBOOK

CLAY AND CONCRETE MASONRY

SEVENTH EDITION

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PREFACE

In 1970, James Amrhein recognized that a comprehensive engineering design handbook was needed which would encompass the coefficients, tables, charts and design data required for the design of reinforced masonry structures. Mr. Amrhein tried to fulfill these requirements with the first edition of this publication. Since then, subsequent editions have been improved and expanded to comply with applicable editions of the Uniform Building Code and International Building Code keeping pace with the growth of reinforced masonry engineering.

The authors would like this book to be as useful as possible to designers of reinforced masonry by eliminating repetitious and routine calculations. This publication will increase the understanding and reduce the time required for masonry design.

The detail and design requirements included in this book are based upon the 2012 edition of the International Building Code published by the International Code Council, and ASCE/SEI 7-10, Minimum Design Loads for Buildings and Other Structures published by the American Society of Civil Engineers. Also included in this edition is information and design tables based on the code reference document, TMS 402/ACI 530/ASCE 5 Building Code Requirements for Masonry Structures.

In addition to the code requirements, this publication includes sound engineering practices to serve as a guide to the engineer and designer.

There may be several design and analysis methods and the results for the design can be somewhat different. Techniques included in this publication have been reviewed by competent engineers who have found the results to be satisfactory and safe. The authors welcome recommendations for the extension and improvement of the material and any new design techniques for future editions.