REVIEWS OF TECHNICAL PUBLICATIONS

ACI 313-02 Discussion and Closure

Proposed changes to the ACI-318-99 Building Code were printed in the June 2001 issue of Concrete International magazine, and these changes were open for public review and discussion for three months. Printed in the January 2002 issue of Concrete International are the discussions received by ACI, along with ACI Committee 318's closure statements, in numerical order by the relevant code provision. Changes made to ACI 318 from the discussion comments are noted in the closure statements. In addition, a number of editorial changes were identified and approved by the committee.

Concrete International, V. 24, No. 1, January 2002, pp. 89-147.

Sulfate Attack on Concrete

Jan Skalny, Jacques Marchand, and Ivan Odler

This book provides a comprehensive reference to the subject of sulfate attack, which is one of several mechanisms of concrete deterioration. Topics include a short history of concrete deterioration due to sulfate attack, the origin of sulfates in concrete, the importance of appropriate concrete processing, forms and physical-chemical mechanisms of concrete deterioration due to sulfates, preventative measures, standardization, and numerous case histories. The authors provide a thorough introduction to the scientific and practical intricacies of sulfate attack mechanisms and aim to stimulate interest among students and researchers of engineering materials.

Spon Press, 29 West 35th Street, New York, NY 10001, 2002, 217 pp.

Long-Span, Slender Pedestrian Bridges

Jiri Strasky

In recent years, long-span concrete bridges have been designed predominantly as cantilever or cable-stayed structures. For long-span bridges to be used primarily by pedestrians or bicyclists, two other structural types—stress-ribbon and suspension structures—are especially suitable. Derived from the oldest structural type of bridge, both of these bridge types have been designed and constructed with span lengths up to 252 m (830 ft). The decks are formed by slender precast or cast-in-place concrete members with thicknesses of up to 400 mm (16 in.).

Concrete International, V. 24, No. 2, February 2002, pp. 43-48.

Construction Materials: Their Nature and Behaviour Third Edition

J.M. Illston and P.L.J. Domone (Editors)

This book is aimed primarily at beginning students in civil and structural engineering and provides introductory information about the behavior of materials. Sections are devoted to individual materials that discuss their structure and composition on the molecular, material, structural, and engineering levels, with consideration of deformation, strength and failure, durability, manufacture, and processing. Generous cross references are given to aid in the comparison and contrast of various materials. Concrete topics discussed include portland cements, admixtures, cement replacement materials, aggregates, properties of fresh concrete, early-age properties, and nondestructive testing.

Taylor & Francis Books, Ltd., Cheriton House, North Way, Andover, Hampshire, SP10 5BE, 2002, United Kingdom.

Is There an Engineer Inside You? A Comprehensive Guide to Career Decisions in Engineering, Second Edition

Celeste Baine

This book was written to expose and debunk negative myths and stereotypes about the engineering profession. The author explores the ins and outs of engineering education from the student's perspective, emphasizing both popular and unusual career opportunities available for today's graduates. Part I discusses who enters the field of engineering, what engineers do, how students can prepare for and succeed in their coursework, and why the field is changing and growing. Part II presents salary information and breaks down the differences among various engineering specialties, from aeronautical to transportation. A bibliography and list of engineering societies provide additional resources for further study. Updated and now covering 27 different branches of engineering, this second edition provides practical advice on thriving in an engineering student environment.

Bonamy Publishing, P.O. Box 1713, Ruston, LA 71273, 2002, 208 pp.

Public Discussion and Closure of "Code Requirements for Environmental Engineering Concrete Structures and Commentary" (ACI 350-01/350R-01)

The ACI Technical Activities Committee (TAC) approved this new standard at their July 1999 meeting. ACI Committee 350 responded adequately to TAC's comments, and the Standards Board granted approval to open the document for public discussion. The public discussion period closed on July 1, 2001. TAC reviewed the closure and approved it on October 28, 2001. On December 11, 2001, the Standards Board approved the closure, approved publication of the discussion and closure, and approved publishing the new ACI Code. The closure addresses specific questions and comments with brief summaries of the committee's position. The closure responses to public comments are listed in the same order as presented by each reviewer.

Concrete International, V. 24, No. 2, February 2002, pp. 107-152.