

design guidance. They include many examples of making an assumption, without explanation, which subsequent calculation shows to have been justified. A much more worthwhile example would be to discuss what to do if the original assumption is not found to be valid.

The main criticism that the reviewer has about the book is its slavish following of BS 8110, as though this code contained equations which covered the actual behaviour of prestressed concrete, as opposed to 'deemed to satisfy' clauses which are usually based on conservative approximations. The code formulae are built around assumptions, which are not stated in the code, the validity of which is unknown to designers of any particular structure. A longer and more general

treatment would have allowed these points to be put into context.

Despite these points, the book is probably the best text around that relates to prestressed concrete behaviour in a British (i.e. BS 8110) context and, as a well-written introductory text at a reasonable price, it is worthy of a place on the bookshelves of many undergraduate and postgraduate students. For more experienced engineers, it should perhaps be used more as a general introduction, to be read in conjunction with more detailed texts.

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Brick and block masonry

Editor: J. W. de Courcy

Elsevier Applied Science, Barking, 1988. 234 mm × 152 mm. 3 volumes: 594 pp., 658 pp., 666 pp. Illustrated, hardback. ISBN 1 85166 262 6; ISBN 1 85166 263 4; ISBN 1 85166 264 2. £160 (3 volumes)

This book is the proceedings of the eighth international brick and block masonry conference, held in Trinity College, Dublin on 19–21 September 1988

Previous conferences, held every three years, in the series have taken place in Austin, Stoke-on-Trent, Bruges, Essen, Rome, Washington and Melbourne. Between these conferences are the international symposia on load-bearing brickwork which are held in London and are organized by the British Masonry Society (formerly by the British Ceramic Society).

The Dublin conference was the first to expand its scope to include blockwork, and this change is also reflected in the symposia, which now concentrate on masonry as opposed to ceramic units. These changes are important as they reflect the somewhat greater co-operation between brick and blockmakers than in the past, and indicate an awareness that it is the masonry industry that competes in the walling market and not small parts of it. This greater unity of purpose is also important in the field of codes and standards, where the action is on an international front. This was emphasized by the fact that, in conjunction with the conference, the Technical Committee of TC 179 of the International Standards Organization took the opportunity to meet to further work on drafts of standards for the design of unreinforced masonry structures and for methods of test for masonry.

The proceedings are published in three volumes and contain 174 papers on the structural use of brick, concrete block and stone masonry. The papers con-

sider both old and innovative materials, mortars, reinforcement and prestressing, wall ties, veneers and cladding and composite forms. Chapters deal with various loading conditions: general, concentrated, eccentric, lateral, shear, torsional, thermal and seismic. The book reports on the examination and testing of existing buildings, and also on their reconstruction and strengthening. The editor detects in the papers an increase in interest in the masonry arch as against previous conferences and questions whether this is related to an increase in interest in the use of compression to retain stability. It is also relevant to note that there are a good number of papers dealing with restoration and rehabilitation, which reflects a large current market. Also there are a significant number of papers related to techniques of test for and performance studies of buildings in use; this is consistent with a recommendation from the Institution of Civil Engineers' report on research needs.

This collection of papers from 25 countries represents the present state-of-the-art in masonry design and construction, and emphasizes areas in which research is active. This book will be of interest to those involved in civil engineering, structural engineering, concrete technology, building science and architecture.

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