Book review

Reinforced concrete

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The importance of this book lies in the fact that as Chairman of the Committee responsible for the production of the Code of Practice for the design of Reinforced Concrete in Normal Buildings—Dr. Faber was in a unique position to indicate the considerations which governed the Committee's recommendations.

The basic principle on which the Committee worked is outlined by Dr. Faber in his introduction. In effect, it is that the Code should be a guide to an engineer in the design of a structure which will be safe despite the empirical nature of many of the calculations and the variability of the materials employed.

Since almost the whole of the reinforced concrete work carried out in the country is governed by this Code, it is important in the interests of national economy that it should be reviewed periodically. Such a revision is now in progress and that consideration will be given to information and experience gained since the first edition was finalised in 1948.

By quoting the experimental evidence relative to many of the clauses of the present Code, Dr. Faber has made it possible for the research worker to appreciate the needs for a re-examination of much of the data applicable to a composite and rather temperamental material.

In particular, data on creep, shrinkage and crack widths which directly affect almost all calculations which can most usefully be studied under approximately design loading for a considerable period. Proportioning aggregates by bulk weight or considerations of surface area and texture. The relation of bond and shear strength to the modulus of rupture. While for those with more philosophical tendencies, a consideration of the reasons for and values of a Factor of Safety.

In view of the scope of this book, it is hardly reasonable to expect that some minor errors will not have crept into a first edition; " Lime to chalk " p. 39: the second formula, p. 70: the argument as to shrinkage, p. 76, or the table p. 85, but these do not in any way affect its value to the student or designer, who though fettered to some extent by a Code, can by its help at least know the reason why.

The Code was drafted as a guide to good practice for use by engineers with a general knowledge of the nature of reinforced concrete. It was not intended to absolve the Engineer from his responsibility to prepare a sound design and the examples by which, the methods of calculation are made clear, do much to ensure the intelligent application of the recommendations.