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reinforcement quantities

Foreword

In 1982 the Institution of Structural Engineers formed a Committee to prepare a *Manual for the design of reinforced concrete building structures* which would be compatible with British Standard BS 8110. Happily the Institution of Civil Engineers has joined in this task and this document is the result. It has been written by and for practising designers and thus reflects the logical sequence of operations which a designer follows.

The Manual covers the majority of reinforced concrete buildings, but with the deliberate exclusion of some items. For example, prestressed and lightweight concretes are not covered and the range of structures is limited to those not dependent on the bending of columns for resistance against horizontal forces. The first limitation does not imply a bias against the use of prestressed or lightweight concrete in buildings while the second limitation recognizes that buildings are usually designed to be braced by strongpoints such as shear walls, infill panels and the like.

Users will note that the recommendations given in this *Manual* fall within the wider range of options in BS8110.

The Committee has aimed at clarity and logical presentation of reinforced concrete design practice in writing the *Manual*. It is hoped that the concise format will be welcomed.

The Manual offers practical guidance on how to design safe, robust and durable structures. The initial design section is a novel feature of the Manual, and the guidance given will make a positive contribution to design practice. If these initial design procedures are followed, the final calculations can be carried out expeditiously. The information has been laid out for hand calculation but the procedures are suited for electronic computations as well.

The preparation of the *Manual* has proceeded concurrently with, but independently of, BS 8110. Helpful comment has been received from members of the BS 8110 Committee, including the Chairman, Dr. D. D. Matthews, Dr. A. W. Beeby and Mr. H. B. Gould. Indeed there has been a valuable two-way exchange which has had an impact on BS 8110.

During the preparation many people have commented, and I would be grateful if any further comment could be forwarded to the Institution.

Lastly I would like to express my thanks to the members of the Committee and their organizations and also to our Secretary, Mr. R. J. W. Milne, for the enthusiasm and harmonious relations which have characterised our work.

D. J. LEE Chairman