Building Quantities Explained

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Building Quantities Explained

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Preface to the Metric Edition

THE PRIMARY AIM of this book, as was that of the first edition (1965), is to meet the needs of students preparing for intermediate examinations in quantities set by the City and Guilds of London Institute and by the various building and surveying bodies, or for degrees or Higher National or college diplomas or certificates in quantity surveying, building or construction.

This book is concerned with the measurement of relatively simple building work in accordance with the principles laid down in the *Standard Method of Measurement of Building Works (metric edition)* and contains many worked examples, accompanied by explanatory notes, covering all the basic building trades. It aims at simply explaining and illustrating the process of measuring building work and of clarifying the basic principles contained in the *Standard Method*, for the benefit of quantity surveying and building students.

The proposed change to metric has created tremendous problems for the construction industry, not least in having to rethink all measurements and weights in S.I. units. There is little doubt that many advantages will accrue from the resultant simplification of the measurement process and the expected rationalisation and standardisation of building products which will flow from the change, and finally we shall secure the benefits of much overdue dimensional co-ordination.

A programme of change has been formulated by the British Standards Institution whereby the bulk of the change will be completed by the end of 1971, but most examining bodies connected with the construction industry have decided to set their 1970 examination papers in metric terms. With the needs of these students in mind I have proceeded, as soon as was practicable, with the preparation of a fully metricated edition, although faced with many problems such as determining the method of notating drawings in metric and the probable metric dimensions of a whole host of building components. At the time of going to press final decisions still had not been made on a number of issues involved, but I have (in consultation with B.S.I. and the manufacturers' organisations) determined feasible metricated values, in order that all descriptions can be expressed in metric terms. It has in a few instances necessitated making assumptions which may subsequently be proved wrong, and the initial metric dimensions of some components may later be changed to dimensionally co-ordinated sizes. For instance, I have described 11 in. hollow walls as 275 mm, 9 in. walls as 225 mm and 4½ in. walls as 110 mm and it is possible that they may subsequently be referred to as 255, 215 and 102.5 mm walls respectively. This procedure is in line with B.S.I. recommendations whereby all

concerned are advised to learn to think metric and not merely to adopt a two-stage process of visualising objects in imperial terms and then converting these values to metric terms.

Hence the equivalent imperial values have not been added in the examples in this book. Students wishing to familiarise themselves with relative values of metric and imperial measure in the early stages may find the metric conversion table in Appendix III to be helpful. This is an analogue conversion table using the nearest, neatest 'rounded-off' equivalent values.

Furthermore, a metric edition of B.S. 1192 relating to architectural and building drawing practice had not been issued when the drawings were being prepared and, in consultation with B.S.I., it was decided to show all dimensions in metres with a decimal marker, while all other sets of figures represent millimetres. This procedure eliminates the need for the use of the 'm' and 'mm' symbols for dimensions on drawings.

Chapter XVI has been enlarged considerably to cover 'cut and shuffle' and the use of computers in greater detail and to permit the inclusion of information on standard phraseology and operational bills. Finally an entirely new chapter has been added to bring out the fundamental differences of approach in the measurement of small dwellings using the Code.

I. H. SEELEY

Nottingham
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Philip Dunstone gave valuable advice on metric problems and the British Standards Institution through R. Harrison, secretary to metric panel B/-/9, co-operated to the full in resolving difficulties stemming from the change to metric.

Grateful thanks are also due to Ronald Sears for his outstanding work in the preparation of drawings, figures and handwritten dimension sheets, which has added immeasurably to the value and quality of the book. Once again much kindly help and earnest consideration has been received from T. E. Blackall of the publishers throughout the production of the book.

Kind permission has been given by the Ellis School of Architecture, Surveying and Building, of London and Worcester, to incorporate some material which the author previously prepared for the School. I also value most highly the helpful suggestions made by my own colleagues at the Nottingham Regional College of Technology.

Lastly, I cannot express too highly my appreciation of the large measure of patience, forbearance and understanding which has been displayed continually by my own family, and without which this work could never have reached fruition.

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Abbreviations

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