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Preface

Construction projects involve high capital investment. Construction market players, including the project developers and the contractors, demand a fair and transparent contract award system. Evolved from the tendering and measurement procedures originated from the British construction industry, local practices such as standard method of measurement, conditions of contract, etc. have been developed over the past years to address the market needs in Hong Kong. However, these local practices are seldom found in the existing textbooks on quantity surveying.

Estimating and measurement of construction works is a fundamental skill to be possessed by professional quantity surveyors. However, the lack of local literature is difficult for beginners to acquire a basic understanding of the techniques. This book is purposely written for students studying measurement and estimating in universities or to someone who has recently assumed quantity surveying duties in their work but without much prior knowledge. The book starts with a review on the procurement and tendering methods commonly used in Hong Kong, followed by the measurement principles and estimating methods applied in major trade works of simple building projects. Annotated diagrams and worked examples based on HKSMM4 have been incorporated to give readers the best idea on interpretation and application of the measurement rules for simple buildings. A worked example that covers the construction of an entire simple building is included to illustrate the integration and relationship of different measurements among various trades. Calculations are structured in a step-by-step approach with explanatory notes to supplement. The examples throughout should provide an ideal source of reference to the beginners of the subject. Feedback and suggestions through the publisher on areas which the readers may feel require more explanation would be most welcome.

Approach

The aim of the book is to describe the subject in an easy-to-follow approach. The main text is divided into five parts following the development of a typical project – Building the Project Team, Deciding the Procurement Strategy, Preparing for Tender, Measuring Quantities, and Estimating Unit Rates. The flow of chapters facilitates the readers to appreciate the application of estimating and measurement work at various stages of the project period.

Part I, 'Building the Project Team', introduces the team setup for a typical project. Part II is 'Deciding the Procurement Strategy'. This part explains the various procurement decisions to be made by an employer before any cost estimating and measurement work takes place. 'Preparing for Tender' demonstrates the tendering methods and tender documentation applied in the local construction industry. Approximate estimating techniques used by quantity surveyors are explained. Part 4 is 'Measuring Quantities'. It starts with an introduction of the measurement principles and HKSMM4, followed by a detailed review on the measurement methods for each major trade. Worked examples with explanatory notes and cross-referencing to HKSMM4 are included. Before moving on the next part, procedures