

PREPARATION OF BILL OF QUANTITIES
USING COMPUTER METHODS

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Project Report
submitted to
the Department of Civil Engineering
of the Higher Technical Institute
Nicosia Cyprus

JUNE 1995

HIGHER TECHNICAL INSTITUTE	PROJECT NO 2410
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THE BILL OF QUANTITIES

INTRODUCTION

DEFINITION

Bill of quantities is the means where by the majority of building work is described and measured.

It sets out the various items of work in a recognised manner and in a logical sequence.

TYPES OF BILLS OF QUANTITIES

There are two main types of Bills of Quantities:

- 1.1. Trade bills.
- 1.2. Elemental bills.

1.1. TRADE BILLS

Trade bills are divided in sections in accordance with the various trades as listed in the Standard Methods of Measurement (SMM).

A typical division of a "trade" bill for quantities would be:

1. Preliminaries
2. Excavation and earthwork
3. Concrete Work
4. Brickwork and blockwork
5. Roofing
6. Woodwork
7. Plumbing installations
8. Floor, wall and ceiling finishing
9. Glazing
10. Painting and decorating
11. Drainage
12. Prime cost and provisional sums.

Advantage: The pricing of the Bills of Quantities at tendering stage can be done very easily.

1.2 ELEMENTAL BILLS

Elemental bills are divided in sections in accordance with the various main elements of the building e.g.:

Internal Walls

External Walls

Floors

etc.

Disadvantage: Pricing of the Bills at tendering stage is complicated as the same item of work may appear in different sections of the Bills (e.g. plastering to walls will appear in the section of the internal walls as well as in the section of the external walls). Thus there is unnecessary repetition of the same prices in different sections of the Bills, whilst the full extent of each item of work, which affects the prices considerably, can only be known by adding up the quantities for this item that appear in different sections of the Bills.

Advantage: The location of most items will be apparent by their position of the Bills of Quantities. This facilitates the administration of the contract on site (e.g. ordering materials, deciding the required number of operatives on site, preparing interim valuations etc.).

Trade bills are generally more widely used than elemental bills.

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