

ASTSPM3008

Measure and draft bills of quantities within a surveying environment



Overview

The Standards that are part of this Unit

SPM3/O08.1 Prepare and measure quantities

SPM3/O08.2 Contribute to the preparation of bills of quantities

This unit is for quantity surveyors who have to work out quantities of materials and equipment for a project.

ASTSPM3O08

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Performance criteria

Prepare and measure quantities

You must be able to:

- P1 assembling and collating **information** and identifying which categories of work require measurement
- P2 reviewing **information** to decide how to measure dimensions and quantities methodically and in a way which conforms to relevant conventions, standard methods and phraseology
- P3 identifying any **information** which is incomplete and inconsistent and obtaining accurate amendments
- P4 recommending what action to take where **measurement** is inappropriate or impossible
- P5 **measuring** the quantities and preparing descriptions accurately, collating and sequencing them correctly and presenting them in a way which meets their **intended purpose**
- P6 checking the accuracy of **information** received and produced

Contribute to the preparation of bills of quantities

You must be able to:

- P7 confirming with line manager the **type** and format of bills of quantities for the **type** of procurement to be adopted
- P8 collating the quantities and descriptions, **producing** them in a recognised form and sequencing them so that they can be included in the documentation
- P9 including within the quantities and descriptions, changes, clarifications and corrections arising from the source documents and the brief
- P10 preparing draft forecasted provisional sums and contingencies so that they can be included in the bills of quantities
- P11 preparing a draft bill of preliminaries for approval by line manager
- P12 obtaining necessary **checks and approvals** and advising line manager

ASTSPM3O08

Measure and draft bills of quantities within a surveying environment

Knowledge and understanding

You need to know and understand:

Prepare and measure quantities

- K1 how do you assemble and collate **information**? (application) (a) [1]
- K2 what do you identify as categories of work requiring **measurement**? (understanding) (a) [2]
- K3 how and why do you review **information** to decide **how to measure dimensions and quantities**? (evaluation) (b) [1,3]
- K4 how do you identify any **information** which is incomplete or inconsistent and obtain accurate amendments? (understanding) (c) [1]
- K5 how and why do you recommend what action to take where **measurement** is inappropriate or impossible? (evaluation) (d) [2]
- K6 how do you check the accuracy of **information** received and produced? (application) (f) [3]
- K7 how do you **measure** the quantities and prepare descriptions accurately? (application)(e)[2,3]
- K8 how do you collate the quantities, sequence them correctly and present them in a way which meets their **intended purpose**? (application) (e)[2,3,4]

Contribute to the preparation of bills of quantities

You need to know and understand:

- K9 how do you confirm the **type** and format of bills of quantities for the type of **procurement** to be adopted? (application) (a) [1,2,3]
- K10 how do you collate, **produce** and sequence the quantities and descriptions in a recognised form so that they can be included in the documentation? (application) (b) [1,2,3,4]
- K11 how do you include, within the quantities and descriptions, changes, clarifications and corrections arising from the source documents and the brief? (application)(c)1,3,5]
- K12 how do you prepare a draft bill of preliminaries? (application) (e) [1,2]
- K13 how do you prepare draft forecasted provisional sums and contingencies? (analysis) (d) [1,2]
- K14 how do you obtain necessary **checks and approvals**? (application) (f) [5]

ASTSPM3O08

Measure and draft bills of quantities within a surveying environment

Additional Information

Scope/range related to performance criteria

Prepare and measure quantities

- 1 **Information:**
 - 1.1 drawings
 - 1.2 schedules
 - 1.3 specifications
 - 1.4 information about the contract and allocation of risks and responsibilities
 - 1.5 quotations
 - 1.6 records of queries raised and answers
 - 1.7 standard methods of measurement
 - 1.8 technical literature

- 2 **Measurement - relates to:**
 - 2.1 trade
 - 2.2 elemental
 - 2.3 operational
 - 2.4 approximate
 - 2.5 schedules of rates

- 3 **How to measure dimensions and quantities methodically:**
 - 3.1 manual
 - 3.2 electronic

- 4 **Intended purpose:**
 - 4.1 procurement
 - 4.2 contract
 - 4.3 production

Contribute to the preparation of bills of quantities

- 5 **Type:**
 - 5.1 trade
 - 5.2 elemental
 - 5.3 operational/activity

- 6 **Format:**
 - 6.1 firm
 - 6.2 approximate
 - 6.3 schedule of rates

- 7 **Procurement:**

ASTSPM3O08

Measure and draft bills of quantities within a surveying environment

- 7.1 competitive tender - limited competition
 - 7.2 open competition (including advertising)
 - 7.3 non- competitive - negotiation
 - 7.4 serial award
- 8 **Producing:**
- 8.1 manual
 - 8.2 electronic
- 9 **Checks and approvals:**
- 9.1 format
 - 9.2 presentation
 - 9.3 accuracy
 - 9.4 technical content
 - 9.5 completeness
 - 9.6 referencing
 - 9.7 cross-referencing and correlation with associated documents
 - 9.8 status

ASTSPM3O08

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