



Australian Government

FWPCOT3304 Take off material quantities

Release: 1

FWPCOT3304 Take off material quantities

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 6.0.

Application

This unit of competency describes the knowledge and skills required to take off material quantities and estimate costs from completed designs and specifications. It involves itemising materials and detailing material sizes and quantities for the purpose of pricing.

The unit applies to designers (timber truss and frame), production fabricators (timber truss and frame) and timber manufactured products technicians who take responsibility for organising and completing these tasks with a high degree of self-direction.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Common Technical (COT)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify materials and prepare to take off	1.1 Determine job requirements from work order, and where required, confirm with appropriate person 1.2 Identify specified materials from production plan 1.3 Select common industry materials where no specific information is provided and material is not critical to design 1.4 Estimate material quantities and express as industry standard

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	lengths or sheet sizes, allowing for minimal wastage 1.5 Determine multiple requirements for identical material, and document total quantities
2. Compile materials list	2.1 Calculate, scale or extract physical dimensions for components from production specifications 2.2 Establish details and dimensions of components to be listed 2.3 Create a material take-off list according to workplace procedures 2.4 Categorise items and complete itemised list of all materials from production specifications 2.5 Compile and maintain detailed notes and records of material usage, and cutting and machining requirements
3. Calculate quantities and prices	3.1 Calculate and document total requirements for each line item in take-off. 3.2 Express quantities in measurement units that match item type, order and production requirements 3.3 Calculate total order costs using item rate chart 3.4 Complete and maintain accurate records of pricing according to workplace procedures 3.5 Retain records of take-off list, pricing and associated documentation

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	- Estimate material quantities and usage for cutting and machining - Use formulas to calculate costs

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPCOT3304 Take off material quantities	FWPCOT3214 Take off material quantities	Application updated Elements and Performance Criteria reworded and re-sequenced Assessment Requirements updated	Equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPCOT3304 Take off material quantities

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has taken off materials for a minimum of two different timber product designs, and has:

- identified material types, quantities and dimensions from production specifications
- created a take-off list to meet job requirements and minimise waste
- calculated cost of listed materials
- completed records of all calculations, material quantities, usage and pricing.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- categories of different timber-based construction materials:
 - panels
 - sawn timber
 - laminated timber
 - timber species
 - manufactured timber
 - surface treated and finished
- timber fabrication industry standard material lengths and sheet sizes
- methods and processes used to:
 - calculate material quantities
 - minimise wastage
 - format for listing and categorising materials
- workplace policies and procedures to:
 - source cost of materials

- prepare, document and save material quantities and pricing.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a timber product design or fabrication facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - access to work orders, workplace policies and procedures and relevant workplace price lists for material costs
 - digital equipment and software to calculate, compile and save take-off material lists and costing documentation, if applicable according to workplace procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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