# **Modification history**

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

FWPCOT3XXX	Take off material quantities
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, detailing material sizes and quantities for the purpose of pricing.  Work is completed in a forest products factory setting.  The unit applies to designers (timber truss & frame), production fabricators (timber truss & frame), timber manufactured products technician  This unit of competency is suitable for individuals 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.
Prerequisite Unit	Nil
Unit Sector	Common technical (COT)

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Identify materials	1.1 Read and interpret production specifications to determine material types and job costing requirements
	1.2 Read, interpret and follow relevant workplace safety and environmental requirements and organisational policies and procedures
	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 lengths or sheet sizes, allowing for minimal wastage
	1.5 Determine multiple requirements for identical material and document total quantities
2. Compile materials list	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 to meet organisational requirements
	2.4 Categorise items and complete itemised list of all materials from production specifications
	2.5 Complete and maintain detailed notes and records of material usage, and cutting and machining requirements
3. Calculate quantities and	3.1 Calculate and document total requirements for each line item in take-off.
prices	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 in line with organisational requirements
	3.5 Save digital 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 measurements and formulas to calculate costs
Technology	Use digital equipment and software to prepare document and save materials quantities list and pricing

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FWPCOT3XXX Take off material quantities	FWPCOT3214 Take off material quantities	Minor Application - added the expected level of performance required in the workplace and minor grammar changes Assessment Conditions – updated to stipulate mandatory conditions Major Elements - 1 renamed to Identify materials, 2 renamed to Compile materials list Performance Criteria – 1.1 to 1.5 reworded to align with renamed Element and re-sequenced. 21 to 2.5 added create a material take off list, reworded to align with renamed Element. 3.5 added save digital records Foundation Skills - deleted reading, writing, planning and organisation and updated numeracy Performance Criteria – added volume and clarified performance Knowledge Evidence – added workplace safety and digital technology	Equivalent

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

TITLE	Assessment requirements for FWPCOT3XXX Take off material
	quantities

#### **Performance Evidence**

An individual demonstrating competency in this unit 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 original 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 and saved accurate digital 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:

- typical categories of different timber based construction materials
- · industry standard material lengths and sheet sizes
- · characteristics, uses and limitations of timber product materials and components
- · industry terminology
- methods and processes used to:
  - calculate material quantities
  - · minimise wastage
  - format tables for listing and categorising materials
- organisational policies and procedures:
  - · source cost of materials
  - · prepare, document and save material quantities and pricing
- workplace safety and environmental requirements
- · digital technology to calculate, compile information and save documentation

#### 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 the workplace or an environment that accurately represents workplace conditions
- · resources, equipment and materials:
  - organisational policies and procedures and guidelines relevant to material take off and costing
  - digital equipment and programs to calculate, compile and save documentation.

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

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	https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-
	3509ff8d3d47