



Australian Government

FWPTMM4204 Sample and test products to specifications

Release: 1

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Modification History

Release	Comment
1	Replaces equivalent unit FPITMM4204B Sample and test products to specifications, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards format.

Application

This unit of competency describes the outcomes required to take product samples and to select and apply authorised testing procedures to ascertain the cause of a problem or to improve techniques.

The unit applies to those who interpret test results and reporting findings in a forest products factory setting. Testing can be for manufactured products, components, assemblies, raw materials, timber, metal alloys, glass, adhesives, fillers, finishes and any other entities produced by the organisation.

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

Pre-requisite Unit

Nil

Unit Sector

Timber Manufactured Products

Timber Merchandising

Elements and Performance Criteria

<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.</i>
1. Prepare for testing	1.1 Select conforming or non-conforming products, materials or waste are for testing in line with organisational requirements. 1.2 Interpret product quality specifications and drawings and select test

	parameters. 1.3 Obtain type and quantity of entities for testing and note design features that impact on testing and inspection. 1.4 Select and calibrate appropriate equipment and check for operational effectiveness in line with manufacturer's recommendations. 1.5 Select and plan testing process in line with organisational procedures.
2. Test samples	2.1 Follow workplace health and safety procedures throughout testing activities. 2.2 Collect procedures and information on operator observation. 2.3 Analyse information on problems or improvement requirements. 2.4 Prepare samples and identify manufacturing dates, times and batches from production records. 2.5 Establish and review test data in line with organisational procedures. 2.6 Conduct test in line with industry standards and environmental protection practices. 2.7 Compare all collected data and check results by further sampling and testing.
3. Evaluate and report test outcomes	3.1 Evaluate test results for impact on production processes. 3.2 Take action to rectify or improve on achieved test results. 3.3 Develop recommendations and consider feasibility of suggestions. 3.4 Record test process, results and recommendations and report to production personnel to facilitate process control or change.

Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

Learning skills to:	test production samples and evaluate outcomes to inform new production techniques.
Numeracy skills to:	- determine appropriate numbers of entities for sample testing to provide reliable test results - interpret numerical production data from specifications, plans and drawings involving dimensions and mixture quantities - calculate and record dimensions and mixture quantities of sampled entities and assess against quality specifications.

Oral communication skills to:	ask questions and actively listen to consult with and seek feedback from production personnel.
Reading skills to:	interpret information in product specifications and plans.
Writing skills to:	- clearly and accurately report on test process and test results - clearly represent rationale for recommended changes to future production processes.
Planning and organising skills to:	efficiently and logically manage operational logistics for sample testing.
Problem-solving skills to:	analyse production problems, consider various solutions and determine recommended changes.
Technology skills to:	- select, calibrate and use equipment appropriate for conducting tests - use a computer, keyboard and software to prepare reports.

Range of Conditions

Not Applicable

Unit Mapping Information

FPITMM4204B Sample and test products to specifications

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for FWPTMM4204 Sample and test products to specifications

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1	Replaces equivalent unit FPITMM4204B Sample and test products to specifications, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards format. Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including Required Skills and Knowledge, Evidence Guide and Range Statement

Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit. If a specific volume or frequency is not stated below, then evidence must be provided that the following requirements have been performed on at least one occasion:

- sample and test product types in line with authorised testing procedures including:
 - manufactured products
 - components
 - assemblies
 - raw materials
 - timber
 - metal alloys
 - glass
 - adhesives
 - fillers, finishes
 - any other entities produced by the organisation
- evaluate test results, for the selected range of products, and complete a detailed and accurate report, covering:
 - test process
 - size of sample
 - results of testing against product quality specifications and set tolerances
 - recommendations to facilitate process control or change.

Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- environmental protection practices for sampling and testing products in a forest products factory settings:
- reducing water and energy use
- safe use and storage of chemicals
- cleaning of plant, tools and equipment
- disposing of, recycling and reusing timber and other waste
- industry common and specific organisational:
- sampling and testing processes and techniques for products
- characteristics of raw materials and other entities
- testing conditions and facilities
- product quality specifications and set tolerances
- common types of tools and equipment used to test products; their purpose, features, operation and calibration requirements
- organisational procedures specific to sampling and testing products:
- workplace health and safety
- use of testing equipment
- sampling and testing processes
- communication reporting lines
- recording and reporting on test process and test results.

Assessment Conditions

The following resources must be made available:

- testing equipment, tools and gauges
- personal protective equipment suitable for sampling and testing products
- a comprehensive range of commercially available raw materials and other entities subject to testing
- product quality specifications and set tolerances
- templates for recording and reporting on test process and test results
- relevant personnel for the purposes of communicating information
- organisational procedures for sampling and testing products

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessor requirements

Assessors must:

- hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and

- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.

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