



Australian Government

FWPCOT3239 Create drawings using computer aided design systems

Release: 1

FWPCOT3239 Create drawings using computer aided design systems

Modification History

Release	Comment
1	Replaces equivalent unit FPICOT3239B Create drawings using computer aided design systems, 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 prepare the computer aided design (CAD) environment, create two dimensional (2D) drawings and produce linked materials lists. Drawings can include plans, diagrams, charts and elevations. Work is completed in a forestry office setting.

The unit applies to Engineered Timber Products Technician, Timber Fabricator.

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

Pre-requisite Unit

Nil

Unit Sector

Common Technical

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 drawing	1.1 Identify type of drawings to be created with computer-aided design (CAD) systems and where required check with appropriate personnel. 1.2 Select appropriate equipment and check for operational effectiveness. 1.3 Plan CAD process in line with organisational procedures.

2. Set up CAD environment	2.1 Customise system variables, menus and drawing defaults to suit production outcomes. 2.2 Develop macros to suit production outcomes.
3. Create 2D drawings	3.1 Create drawings using full capability of available software system 3.2 Link drawing entities to database attributes to suit production outcomes. 3.3 Create detailed views using various scales. 3.4 Save files in various formats in line with organisational procedures. 3.5 Format linked drawing entities as materials lists in line with production requirements. 3.6 Extract supplementary product dimension data from drawings. 3.7 Record and report drawing process and equipment faults to appropriate personnel.

Foundation Skills

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

Numeracy skills to:	calculate dimensions for product components and clearly represent these in drawings.
Oral communication skills to:	ask open and closed probe questions and actively listen to clarify types of drawings to be completed.
Reading skills to:	interpret detailed familiar organisational procedures for computer drawing activities.
Writing skills to:	complete accurate basic reports on drawing processes and equipment faults.
Planning and organising skills to:	plan processing of drawings in a logical sequence and manage own timing and productivity to complete drawings within deadlines.

Range of Conditions

Not Applicable

Unit Mapping Information

FPICOT3239B Create drawings using computer aided design systems

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 FWPCOT3239 Create drawings using computer aided design systems

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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:

- follow organisational policies and procedures relevant to creating drawings using CAD systems
- create drawings using CAD systems in line with site requirements
- produce linked materials lists
- across the above jobs, produce these different types of drawings using CAD systems:
 - plans
 - diagrams
 - charts
 - elevations
 - exploded views
- incorporate these drawing entities:
 - lines
 - arcs
 - circles
 - text
 - hatch
 - dimensions
- complete a basic report on drawing processes and equipment faults.

Knowledge Evidence

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

- common products for which computer aided 2D drawings are produced, their features, use and standard material sizes
- for the drawing software:
 - available 2D drawing types
 - system functions and capabilities
 - methods to:
 - set up system variables, menus and macros
 - prepare 2D drawings
 - prepare and explode detailed views
 - link drawing entities to materials lists
 - extract supplementary product dimension data from drawings
 - store and retrieve drawings and materials lists
- formats for and inclusions of materials lists
- organisational policies and procedures for producing drawings and documents using computers.

Assessment Conditions

The following resources must be made available:

- computers, keyboards and industry current software programs used to produce computer aided 2D drawings and material lists
- product information on which to base drawings
- template materials lists
- template documents for recording drawing processes and equipment faults
- organisational policies and procedures for producing drawings and documents using computers.

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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