Modification history

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

FWPCOT3XXX	Create drawings using computer aided design systems	
Application	This unit of competency describes the skills and knowledge required to produce various types of drawings using computer aided design (CAD). It includes producing plans, diagrams, charts and linked materials lists.	
	It applies to those who work in a forestry setting such as an engineered timber products technician or a timber fabricator.	
	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.	
Prepare for drawing	1.1 Read, interpret and follow organisational policies and procedures and safe work practices related to using CAD	
	1.2 Identify type of drawings to be created with CAD systems check with appropriate person	
	1.3 Select appropriate equipment and check for operational effectiveness1.4 Plan CAD process in line with organisational procedures	
2. Set up CAD	2.1 Identify software features that will best generate the required drawing outcomes	
	2.2 Customise CAD system variables, menus, drawing defaults and macros to suit production outcomes	
	2.3 Identify and apply basic drawing elements	
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 outcomes3.3 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 person	

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	
Reading	Interpret, analyse and comprehend CAD program text, symbols and abbreviations to apply relevant information to drawings	

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FWPCOT3XXX Create drawings using computer aided design systems	FWPCOT3239 Create drawings using computer aided design systems	Application clarified Performance Criteria, Foundation Skills and Assessment Requirements updated	Equivalent unit

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 Create drawings using computer aided design systems

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 created a set of drawings using computer aided design (CAD) program for a timber product project and used the software to:

- · manipulate the drawing origin and entities
- create and use layers
- modify dimension styles
- · access libraries and define and utilise symbols and abbreviations
- · display various scaled views
- add title block
- prepare project to printing
- produce a linked materials list

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:

- organisational policies and procedures relevant to creating CAD drawings
- characteristics, application and limitations of forestry timber products
- various CAD programs their capabilities, functions and processes
- drawing outcomes:
 - orthographic
 - isometric
 - · perspective
 - 2-dimentional (2-D)
 - 3-dementional (3-D)
- drawing elements:
 - · points, line angles, circles, arcs, planes, solids and figures
 - shapes squares, rectangles, triangles
 - bisected and divided lines
 - dimensions and hatchings
- drawing tools:
 - · delete, fillet, chamfer, erase, trim/extend, break, undo and redo
 - zoom and pan
 - move, copy, rotate, mirror
 - polar and rectangular duplication
 - object snaps
 - dimension/measure/divide
 - scale
- drawing features:
 - built in specifications
 - save
 - file import/export
 - print
- 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.

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:
 - computers, keyboards and industry current software programs used to produce CAD 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.

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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	3509ff8d3d47