



Australian Government

FWPCOT3307 Create drawings using computer aided design software

Release: 1

FWPCOT3307 Create drawings using computer aided design software

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 skills and knowledge required to produce various types of drawings using computer aided design software. It includes producing plans, diagrams, component details and linked materials lists.

The unit applies to timber truss or frame fabricators and engineered timber product technicians who create drawings of timber and wood products and 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. Prepare for drawing	1.1 Determine job requirements from work order or fabrication plans and, where required, confirm with appropriate person 1.2 Identify types of drawings in set to be created with design software according to intended use 1.3 Select appropriate equipment, and check for operational

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	effectiveness 1.4 Plan use of computer aided design software according to workplace procedures
2. Set up software	2.1 Identify software features that will best generate the required drawing outcomes 2.2 Customise design software 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 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 according to workplace procedures 3.5 Format linked drawing entities as material lists according to 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 design software 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
FWPCOT3307 Create drawings using computer aided design software	FWPCOT3239 Create drawings using computer aided design systems	Application clarified Performance Criteria, Foundation Skills and 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 FWPCOT3307 Create drawings using computer aided design software

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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 created a set of drawings using a design software program for at least one timber product project, and used the software to:

- manipulate the drawing origin and entities
- 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:

- workplace policies and procedures relevant to using digital devices, software and creating drawings for a timber project
- capabilities, functions and processes of drawing software programs
- drawing outcomes:
 - orthographic
 - isometric
 - perspective
 - 2-dimensional (2D)
 - 3-dimensional (3D)
- 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 according to workplace procedures.

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 fabrication facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - computers with current software programs used to produce drawings and materials lists
- specifications:
 - access to workplace product information and fabrication plans on which to base drawings
 - access to workplace materials' lists templates
 - access to workplace 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.

Links

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