Australian Government

FWPCOT4201 Produce complex truss and frame plans and details using computers

Release: 1

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Modification History

Release	Comment
1	Replaces superseded equivalent FPICOT4201B Produce complex truss and frame plans and details using computers, which was first released with FPI11 Forest and Forest Products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 use computerised systems to produce complex truss or frame plans, including layout production, fabrication and installation instructions. Work is completed in a forest and wood products office setting.

The unit applies to a designer or developer of truss and frame plans.

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

ELEMENTS *Elements describe the essential outcomes.*	PERFORMANCE CRITERIA *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.*
1. Interpret plans and	1.1 Interpret and assess plans, drawing views and notes; identify

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ELEMENTS	PERFORMANCE CRITERIA
loading conditions	loading information, design requirements and restrictions. 1.2 Obtain additional information and data from appropriate personnel or sources. 1.3 Create functional and pictorial image of structure, trusses or frames based on design requirements. 1.4 Refer design requirements outside software limitations to appropriate personnel for resolution.
2. Test and select design options	2.1 Transfer fixed design details to layout data in line with software requirements. 2.2 Specify frame or truss design types, and select timber type and species in line with material suitability and availability. 2.3 Set common industry spacing of frames, trusses and their components to defined design structure in line with industry standards. 2.4 Fix component sizes to clarify and firm design options. 2.5 Select layouts, spacing and sizing of individual structural members progressively in line with software requirements. 2.6 Select, review and revise design details in line with work order.
3. Produce layouts and cutting requirements	3.1 Review design records for design integrity, completeness and consistency in line with certifying authority standards. 3.2 Produce structure layout drawings and truss or frame assembly drawings using appropriate software. 3.3 Produce component cutting detail in line with production requirements and schedules. 3.4 Prepare and document production and installation advice in line with organisational procedures and industry standards. 3.5 Complete and maintain design records and documentation in line with organisational procedures.
4. Provide advice on design and production issues	4.1 Answer questions about designs and assembly requirements clearly and comprehensively. 4.2 Use effective communication techniques to assist and develop production personnel. 4.3 Provide alternative materials and sizes for components within design scope and production requirements. 4.4 Discuss common site problems and select appropriate prevention strategies to ensure future practice meets design requirements.

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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:	• interpret numerical data from designs involving height, length, angles, shape, and load • input complex numerical data into software systems for layout, spacing and dimensions of structural members.
Oral communication skills to:	• ask detailed open and closed probe questions and actively listen to clarify contents of designs, plans, drawings and notes • provide clear unambiguous information about designs and assembly requirements • negotiate solutions to site installation problems.
Reading skills to:	• interpret detailed and unfamiliar designs and technical notes.
Writing skills to:	• input clear written text into software systems • produce clear and detailed documents to support interpretation of drawings and assist with production and installation.
Planning and organising skills to:	• plan and organise own work in logical sequence and manage own timing and productivity to complete plans, drawings and documents within deadlines.

Range of Conditions

Not Applicable

Unit Mapping Information

FPICOT4201B Produce complex truss and frame plans and details using computers

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47

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