

**Modification history**

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

FWPXXXXXXX	Work effectively in the timber systems design industry
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to work effectively with a broad range of individuals and teams within the timber manufacturing products sector. It includes a sound understanding of the organisations' operations work practices and processes of timber systems design.</p> <p>The unit applies to individuals who contribute to and provide quality product service to clients.</p> <p>This unit of competency is suitable for individuals using their own judgment to deal with predictable and unpredictable problems and decide on solutions to a range of problems during the timber design process.</p> <p>Work is completed in a timber production or design setting.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Timber Manufacturing Products (TMM)

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. Demonstrate an understanding of organisational requirements	1.1 Access, read and identify organisational policies and procedures relating to timber manufacturing products 1.2 Identify, read and interpret relevant timber system design regulations, codes, and standards 1.3 Locate and recognise relevant workplace safety and environmental requirements 1.4 Identify roles and responsibilities of a timber systems designer 1.5 Identify and maintain effective relationships with key stakeholders
2. Apply product and process knowledge	2.1 Apply efficient designer practices and ensure sequencing of tasks during the project life cycle 2.2 Source and share information on new and emerging timber products and construction techniques that impact the timber system design 2.3 Propose and promote the benefits of timber products to stakeholders 2.4 Recognise factors that impact on design and manufacture of timber systems 2.5 Identify available methods of design and manufacture that optimise effective production
3 Work effectively	3.1 Source relevant project design documentation to efficiently facilitate cross referencing and interpreting design processes and procedures 3.2 Identify design materials and equipment to effectively complete the design task 3.3 Identify and resolve problems that impact the design, manufacturer and construction of timber systems 3.4 Utilise technology to design, cost, communicate project information and save project documentation 3.5 Communicate and clarify project and design information with fabrication persons and stakeholders 3.6 Undertake professional development appropriate to the job role

<b>Foundation Skills</b>	
<i>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.</i>	
<b>Skill</b>	<b>Description</b>
Reading	<ul style="list-style-type: none"> <li>Recognise and integrate information from various documentation to understand organisational requirements</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Select and use vocabulary appropriate to the audience</li> <li>Use terminology specific to stakeholder role</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Use measurement and formulas to calculate material quantities and costing</li> </ul>

<b>Unit Mapping Information</b>			
<b>Code and title current version</b>	<b>Code and title previous version</b>	<b>Comments</b>	<b>Equivalence status</b>
FWPXXXXXXX Work effectively in the timber systems design industry			New unit

<b>Links</b>	Companion Volumes, including Implementation Guides, are available at VETNet:
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<b>TITLE</b>	<b>Assessment requirements for FWPXXXXXXX Work effectively in the timber systems design industry</b>
<b>Performance Evidence</b>	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has worked effectively in the timber systems design industry by:</p> <ul style="list-style-type: none"> <li>• identifying and detailing own job role within the timber system design industry</li> <li>• carrying out the duties of a timber systems designer effectively and efficiently</li> <li>• following relevant organisational policies and procedures within the job role</li> <li>• applying appropriate regulations, codes and standards to a design project</li> <li>• resolving issues that negatively impact product design practically and cost effectively</li> <li>• develop and maintain stakeholder and work team relationships</li> <li>• using technology to communicate information and prepare and save documentation</li> <li>• completing projects within specific time frames and complying with organisational quality requirements</li> <li>• maintain own professional development.</li> </ul>	

<b>Knowledge Evidence</b>	
<p>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:</p> <ul style="list-style-type: none"> <li>• relevant building industry regulations codes and standards: <ul style="list-style-type: none"> <li>• National Construction Code (NCC)</li> <li>• timber framing code</li> </ul> </li> <li>• organisational policies, procedures and processes: <ul style="list-style-type: none"> <li>• outcomes and consequences of non-conforming design</li> </ul> </li> <li>• construction terminology</li> <li>• key features of plans, drawings and specifications <ul style="list-style-type: none"> <li>• types and applications of plans and drawings</li> <li>• drawing conventions</li> </ul> </li> <li>• using computers and appropriate software to: <ul style="list-style-type: none"> <li>• research information</li> <li>• communicate with internal and external stakeholders</li> <li>• input and amend design factors and other data</li> <li>• produce drawings, plans and documents</li> <li>• save and retrieve documents</li> </ul> </li> <li>• types, functions, capabilities and limitations of drawing software</li> <li>• application, characteristics and limitations of materials and components used for: <ul style="list-style-type: none"> <li>• wall frames</li> <li>• flooring systems</li> <li>• roofing systems</li> </ul> </li> <li>• communicating and maintaining relationships with key stakeholders: <ul style="list-style-type: none"> <li>• architects</li> <li>• engineers</li> <li>• suppliers</li> <li>• builders</li> <li>• building regulators</li> <li>• industry associations</li> <li>• government bodies</li> </ul> </li> <li>• project life cycle: <ul style="list-style-type: none"> <li>• initial planning</li> <li>• contract endorsement</li> <li>• project planning</li> <li>• timber systems design and manufacture</li> <li>• construction progress from commencement to completion</li> </ul> </li> <li>• factors that impact timber design: <ul style="list-style-type: none"> <li>• location and type of building</li> </ul> </li> </ul>	

<b>Knowledge Evidence</b>
<ul style="list-style-type: none"><li>• material availability</li><li>• cost and quality of materials and components</li><li>• effect of floor members position on overlaying frame and roof truss member position</li><li>• certifying timber systems design layouts</li><li>• relevant work health and safety and environmental requirements.</li></ul>

<b>Assessment Conditions</b>
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"><li>• physical conditions:<ul style="list-style-type: none"><li>• skills must be demonstrated in design or manufacturing workplace or an environment that accurately represents workplace conditions</li></ul></li><li>• resources, equipment and materials:<ul style="list-style-type: none"><li>• computers and software programs</li><li>• printer/s and stationary</li></ul></li><li>• specifications:<ul style="list-style-type: none"><li>• specific organisational policies, procedures and processes</li><li>• relevant building regulations, codes and standards</li><li>• work health and safety and environmental documentations</li></ul></li><li>• relationships:<ul style="list-style-type: none"><li>• clients/stakeholders to discuss design systems</li></ul></li></ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>

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