

**Modification history**

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 8.0.

FWPTMM3XXX	Develop knowledge of reconstituted wood panel production
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to recognise the processes involved in the production of a reconstituted wood panel product, selected from chipboard, hardboard, medium and high-density fibre board (MDF), oriented strand board (OSB), particle board or masonite. It includes the types and characteristics of the selected reconstituted wood panel product, the stages in the production of the reconstituted wood panel product, the adhesives and adhesive systems used in the production of the reconstituted wood panel product, and quality control in the production of the reconstituted wood panel product.</p> <p>The unit applies to operational staff who are engaged in a range of work roles in the production of reconstituted wood panel products.</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 Manufactured 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. Recognise properties and uses of selected reconstituted wood panel product	1.1 Identify mechanical and physical properties of reconstituted wood panel product 1.2 Identify application of reconstituted wood panel product in building and construction 1.3 Assess advantages and disadvantages of using reconstituted wood panel product as a building and construction material
2. Research production process for selected reconstituted wood panel product	2.1 Identify workflow in production process 2.2 Identify equipment and processes involved in production of reconstituted wood product 2.3 Assess factors that may impact on workflow in production process 2.4 Assess safety and environmental hazards associated with production process
3. Recognise adhesive and adhesive systems used in production of selected reconstituted wood panel product	3.1 Identify types, properties and hazards associated with adhesives used in production of reconstituted wood panel product 3.2 Identify types and applications of adhesive systems used in production of reconstituted wood product 3.3 Identify factors that influence bond quality
4. Assess quality control checks in production of selected reconstituted wood panel product	4.1 Identify quality control check points in production process 4.2 Recognise quality parameters and process data collected and monitored during production process.

<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>Read material safety sheets on adhesives used in production of reconstituted wood panel product</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>
FWPTMM3XXX Develop knowledge of production of reconstituted wood panel product	Not applicable	The unit has been created to address a skill or task required by industry that is not covered by an existing unit.	New unit

<b>Links</b>	
	Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47</a>

<b>TITLE</b>	<b>Assessment requirements for FWPTMM3XXX Develop knowledge of production of reconstituted wood panel product</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 researched one reconstituted wood panel product selected from the following:</p> <ul style="list-style-type: none"> <li>• chipboard</li> <li>• hardboard</li> <li>• medium or high-density fibre board (MDF)</li> <li>• oriented strand board (OSB)</li> <li>• particle board</li> <li>• masonite.</li> </ul> <p>In the course of this work, the individual has identified:</p> <ul style="list-style-type: none"> <li>• two mechanical and physical properties of the reconstituted wood panel product</li> <li>• one application of the reconstituted wood panel product in the building and construction industry</li> <li>• one advantage and one disadvantage of using the reconstituted wood panel product in building and construction</li> <li>• production workflow for the reconstituted wood panel product and two factors that may affect workflow performance</li> <li>• one type of adhesive and one type of adhesive system used in the production of the reconstituted wood panel product</li> <li>• properties and one potential hazard of one adhesive product used in the production of the reconstituted wood panel product</li> <li>• three examples of quality control check points in the production of the reconstituted wood panel product</li> <li>• three factors that may affect adhesion quality in the production of the reconstituted wood panel product.</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>• mechanical and physical properties of reconstituted wood panel product: <ul style="list-style-type: none"> <li>• Australian Standard specification for dimensions</li> <li>• moisture properties</li> <li>• absorption and swelling</li> <li>• dimensional changes</li> <li>• thermal properties</li> <li>• acoustic properties</li> <li>• bio-deterioration</li> </ul> </li> <li>• application of reconstituted wood panel product in building and construction <ul style="list-style-type: none"> <li>• uses of product</li> <li>• advantages of use in building and construction:</li> <li>• disadvantages of use in building and construction</li> </ul> </li> <li>• stages involved in production of reconstituted wood panel product: <ul style="list-style-type: none"> <li>• raw material procurement or generation</li> <li>• particle preparation</li> <li>• drying</li> <li>• blending with adhesive and sometimes wax</li> <li>• forming</li> <li>• pressing</li> <li>• finishing</li> </ul> </li> <li>• factors impacting on workflow in production of reconstituted wood panel product: <ul style="list-style-type: none"> <li>• availability of raw materials</li> </ul> </li> </ul>	

<b>Knowledge Evidence</b>	
<ul style="list-style-type: none"> <li>operational, supervisory and management skills</li> <li>access to and maintenance of plant and equipment</li> <li>types, properties and hazards of adhesives used in production of reconstituted wood panel product</li> <li>types and applications of adhesive systems used in production of reconstituted wood panel product</li> <li>quality control check points in production process for reconstituted wood panel product</li> <li>quality parameters and process data collected and monitored during production process.</li> <li>defects in reconstituted wood panel product</li> <li>factors that may affect adhesion quality in production of reconstituted wood panel product</li> <li>safety and environmental hazards associated with production of reconstituted wood panel product.</li> </ul>	
<b>Assessment Conditions</b>	
<p>Assessment of the skills in this unit of competency 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 a work environment or an environment that accurately represents workplace conditions</li> </ul> </li> <li>resources, equipment and materials: <ul style="list-style-type: none"> <li>reference materials on production process for reconstituted wood panel product and adhesives and adhesive systems used in production of reconstituted wood product</li> <li>Internet access and computer software and hardware for accessing technical information on production of reconstituted wood panel product</li> </ul> </li> <li>specifications: <ul style="list-style-type: none"> <li>sections of National Construction Code related to application of reconstituted wood panel product in building and construction.</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>	
<b>Links</b>	<p>Companion Volume implementation guides are found in VETNet:</p> <p><a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47</a></p>