

<b>LMFFM2011B</b>	<b>Apply manufactured board conversion techniques</b>
<b>Unit descriptor</b>	This unit covers the competency to apply manufactured board conversion techniques to produce furnishing component parts and manufactured board panel doors.
<b>Employability skills</b>	This unit contains employability skills.
<b>Unit sector</b>	Furniture Making

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
1. Prepare for work	<ul style="list-style-type: none"> <li>1.1. Work instructions are used to determine job requirements, including design, quality, materials, equipment, and quantities</li> <li>1.2. Cutting list and job specifications are read and interpreted</li> <li>1.3. Workplace health and safety requirements, including ventilation requirements and personal protection needs, are observed throughout the work</li> <li>1.4. Material for machining is selected and inspected for quality</li> <li>1.5. Cutting patterns are applied to minimise waste material</li> <li>1.6. Procedures are identified for maximising energy efficiency while completing the job</li> </ul>
2. Set up machines	<ul style="list-style-type: none"> <li>2.1. Safety equipment, including emergency stops, gauges, guards and controls are checked</li> <li>2.2. Machine settings and adjustments are made in accordance with job requirements and machine and tool manufacturers' instructions</li> <li>2.3. Machines, cutting tools and jigs are identified and checked for safe and effective operation</li> <li>2.4. Trial runs are conducted to check machine operation, accuracy and quality of finished work</li> <li>2.5. Necessary adjustments are made to machine settings</li> </ul>
3. Apply conversion techniques	<ul style="list-style-type: none"> <li>3.1. Machine start-up procedure is carried out in accordance with manufacturers' instructions</li> <li>3.2. Material is fed/placed into machine in accordance with manufacturers' instructions, safe handling procedures and standard workplace operating procedures</li> <li>3.3. Machine is operated in accordance with its designed capacity and purpose, tooling requirements and to manufacturers' recommendations</li> <li>3.4. Machine operation is monitored to ensure product quality and output</li> <li>3.5. Waste quantities are checked and minimised</li> <li>3.6. Items that do not meet quality requirements are repaired, recycled or discarded according to workplace procedures</li> </ul>

	3.7. Problems with the required work and/or the operation of the machine are identified and reported to appropriate persons
4. Clean up work area and maintain equipment	<p>4.1. Material that can be reused is collected and stored</p> <p>4.2. Waste and scrap are removed following workplace procedures</p> <p>4.3. Equipment and work area are cleaned and inspected for serviceable condition in accordance with workplace procedures</p> <p>4.4. Operator maintenance is completed in accordance with manufacturers' specifications and site procedures</p> <p>4.5. Unserviceable equipment is tagged and faults identified in accordance with workplace procedures</p> <p>4.6. Equipment and tooling are maintained in accordance with workplace procedures</p>

### REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

#### Required skills

- collect, organise and understand information related to work orders, manufactured board conversion techniques, machine operations, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- use pre-checking and inspection techniques to anticipate conversion problems, avoid reworking and avoid wastage
- use the workplace technology related to conversion, including tools, equipment and measuring devices

#### Required knowledge

- types, characteristics, uses and limitations of manufactured board
- the range, characteristics, uses and limitations of panel-saw, scoring saw, NC beam saw and wall saw
- general workplace quality standards and procedures
- workplace guidelines regarding acceptable tolerance levels
- workplace safety policies and procedures
- procedures for reporting machinery faults and material defects

<b>RANGE STATEMENT</b>	
<p>The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.</p>	
<p><b>Products of conversion techniques are to include:</b></p>	<ul style="list-style-type: none"> <li>• end panels</li> <li>• shelving</li> <li>• bench tops</li> <li>• backs</li> <li>• bottoms</li> <li>• doors and fixing rails</li> </ul>
<p><b>Machines</b></p>	<p>Machines are to include panel saw and scoring saw and may include NC beam saw and wall saw</p>
<p><b>Unit context</b></p>	<ul style="list-style-type: none"> <li>• OH&amp;S requirements include legislation, building codes, material safety management systems, hazardous substances and dangerous goods code and local safe operating procedures</li> <li>• Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements</li> <li>• Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the set-up, operation and maintenance of machines</li> <li>• Competency may be demonstrated in workplaces involved in the production of manufactured board domestic furniture, commercial furniture, kitchen and bathroom cabinets and/or components</li> </ul>
<p><b>Tools and equipment are to include but are not limited to:</b></p>	<ul style="list-style-type: none"> <li>• measuring devices</li> <li>• machine associated tools</li> <li>• materials handling equipment/lifting devices</li> </ul>
<p><b>Manufactured board may include:</b></p>	<ul style="list-style-type: none"> <li>• raw board</li> <li>• melamine surfaces</li> <li>• veneered board</li> <li>• plywood and hard board</li> </ul>
<p><b>Personal protective equipment</b></p>	<p>Personal protective equipment is to include that prescribed under legislation, regulations and enterprise policies and practices</p>
<p><b>Information and procedures</b></p>	<ul style="list-style-type: none"> <li>• Workplace procedures relating to the use of tools and equipment</li> <li>• Work instructions, including job sheets, cutting lists, plans, drawings and designs</li> <li>• Workplace procedures relating to reporting and communication</li> <li>• Manufacturers' specifications and operational procedures</li> </ul>

<b>EVIDENCE GUIDE</b>	
The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the relevant Training Package.	
<b>Critical Aspects of Evidence</b>	<ul style="list-style-type: none"> <li>• Read and interpret cutting lists and job specifications to prepare for work</li> <li>• Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment</li> <li>• Identify materials used in the work process</li> <li>• Follow work instructions, operating procedures and inspection processes to: <ul style="list-style-type: none"> <li>◦ minimise the risk of injury to self or others</li> <li>◦ prevent damage to goods, equipment and products</li> <li>◦ maintain required production output and product quality</li> </ul> </li> <li>• Apply at least five different conversion techniques/operations covering the: <ul style="list-style-type: none"> <li>◦ preparation of cutting plans to minimise waste</li> <li>◦ selection of the correct materials</li> <li>◦ application of conversion techniques including at least one surfaced board requiring the use of a scoring saw</li> </ul> </li> <li>• Work effectively with others</li> <li>• Modify activities to cater for variations in workplace context and environment</li> </ul>
<b>Resource Implications</b>	Access to conversion machinery as identified in the Range Statement, standard operating procedures, and unprocessed materials.
<b>Method of Assessment</b>	<p>Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.</p> <p>Assessment should be by direct observation of tasks and questioning on underpinning knowledge.</p> <p>Assessment should be conducted over time and may be in conjunction with assessment of other units of competency.</p>
<b>Context of Assessment</b>	Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.