



Australian Government

MSFFM2005 Join solid timber

Release: 1

MSFFM2005 Join solid timber

Modification History

Release 1 - New unit of competency

Application

This unit of competency covers joining solid timber required for the manufacture of solid timber flat surfaces.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Competency Field

Unit Sector

Furniture Making

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.												
1 Prepare the work	<table><tr><td>1.1</td><td>Work instructions are used to determine job requirements, including process, materials, finish and quantity</td></tr><tr><td>1.2</td><td>Work sequence is planned</td></tr><tr><td>1.3</td><td>Procedures are determined for checking quality at each stage of the process</td></tr><tr><td>1.4</td><td>Work health and safety (WHS) requirements, including personal protection needs, are observed throughout the work</td></tr><tr><td>1.5</td><td>Suitable work area is selected for the task</td></tr><tr><td>1.6</td><td>Tools and equipment suitable for application are identified and checked for safe and effective operation</td></tr></table>	1.1	Work instructions are used to determine job requirements, including process, materials, finish and quantity	1.2	Work sequence is planned	1.3	Procedures are determined for checking quality at each stage of the process	1.4	Work health and safety (WHS) requirements, including personal protection needs, are observed throughout the work	1.5	Suitable work area is selected for the task	1.6	Tools and equipment suitable for application are identified and checked for safe and effective operation
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2 Lay out and prepare materials	<table><tr><td>2.1</td><td>Timbers are selected and checked for defects following work instructions</td></tr></table>	2.1	Timbers are selected and checked for defects following work instructions										
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| | 2.2 | Suitable joining processes are selected and prepared |
| | 2.3 | Timbers are prepared for joining and laid out |
| 3 | Join timber | 3.1 Timbers are measured, marked and cut to size |
| | 3.2 | Machinery is used in accordance with workplace procedures, including use of personal protective equipment |
| | 3.3 | Adhesives are applied according to workplace procedures and/or manufacturer instructions |
| | 3.4 | Final trim and finishing are completed to specifications |
| | 3.5 | Work is checked against required quality standards |
| 4 | Finalise operation and maintain equipment | 4.1 Work area is cleaned, hand and/or power tools and equipment are cleaned, maintained and stored in accordance with workplace procedures |
| | 4.2 | Machinery is cleaned and left in a safe mode |
| | 4.3 | Faulty and/or defective equipment is tagged and reported in accordance with workplace practices |
| | 4.4 | Off-cuts and unused materials are collected and stored for re-use or disposal following workplace procedures |
| | 4.5 | Waste and scrap materials are dealt with following workplace procedures |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency. Detail on appropriate performance levels for each furnishing unit of competency in reading, writing, oral communication and numeracy utilising the Australian Core Skills Framework (ACSF) are provided in the Furnishing Training Package Implementation Guide.

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Range is restricted to essential operating conditions and any other variables essential to the work environment.

Edge joining methods include:

- butt and dowel
- moulded edge joint (finger-joint, tongue in groove and zig-zag)
- biscuit joint
- slip-tongue joint

Unit context includes:

- WHS requirements, including legislation, building codes, material safety management systems, hazardous substances and dangerous goods code, and local safe operating procedures
- work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements
- work requires individuals to demonstrate some discretion, judgement and problem solving in joining solid timber
- competency may be demonstrated in workplaces involved in the manufacture of solid timber furniture, domestic furniture, commercial furniture, kitchen and bathroom cabinets and/or furniture components

Machines include:

- panel saw
- cross-cut saw
- rip saw
- surface planers
- panel planer
- spindle moulder
- sanders and vertical and horizontal drills

Tools and equipment include:

- measuring tapes or rulers
- hammers
- mallets
- squares
- bevels
- chisels
- planes
- hand saws
- power saws
- power drills
- biscuit machines
- pneumatic tools, compressor and spray equipment
- dowel jigs
- hoses
- clamps and pincers

Materials include:

- adhesives
- abrasives and cleaning materials

Personal protective equipment includes:

- that prescribed under legislation, regulations and enterprise policies and practices

Information and procedures include:

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturer instructions for the use of equipment and materials

Unit Mapping Information

Supersedes and is equivalent to LMFFM2005B Join solid timber.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>

Assessment Requirements for MSFFM2005 Join solid timber

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Performance Evidence

- Interpret work order and locate and apply relevant information
- Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- Follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- Join at least four (4) solid timber tops of a minimum of three (3) sections and using a minimum of four (4) different edge joining methods
- Use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material
- Communicate ideas and information to enable confirmation of work requirements and specifications and the reporting of work outcomes and problems, interpret basic plans and follow safety procedures
- Minimise wastage of resources, including materials, time and money
- Work with others and in a team by recognising dependencies and using cooperative approaches to optimise work flow and productivity

Knowledge Evidence

- Types, characteristics (including cupping, expansion, twisting, bowing, spring and grain direction), uses and limitations of timbers
- Interpretation of plan representation of furniture design
- Joining techniques and their effect on timbers
- Types of sawing methods, including back sawn and quarter sawn, and the impact of these on joining
- Preparation of drawings/set-outs
- Identification of hand and/or power tools, materials, equipment, processes and procedures
- Work flow in relation to furniture production

Assessment Conditions

- Assessors must:
 - hold training and assessment competencies as determined by the National Skills Standards Council (NSSC) or its successors

- have vocational competency in the furnishing industry at least to the level being assessed with broad industry knowledge and experience, usually combined with a relevant industry qualification
- be familiar with the current skills and knowledge used and have relevant, current experience in the furnishing industry.
- Assessment methods must confirm consistency of performance over time rather than a single assessment event and in a range of workplace relevant contexts.
- Assessment must be by observation of relevant tasks with questioning on underpinning knowledge and, where applicable, multimedia evidence, supervisor's reports, projects and work samples.
- Assessment is to be conducted on single units of competency or in conjunction with other related units of competency. Foundation skills are integral to competent performance in the unit and should not be assessed separately.
- Assessment must occur on the job or in a workplace simulated facility with relevant process, equipment, materials, work instructions and deadlines.
- Access is required to plans, hand and/or power tools, equipment, joining and finishing materials and woodworking machinery.

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