



Australian Government

MSFFM2006 Hand make timber joints

Release: 1

MSFFM2006 Hand make timber joints

Modification History

Release 1 - New unit of competency

Application

This unit of competency covers joining timber by constructing joints using hand and portable power tools.

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.

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|---|------------------|-----|--|
| 1 | Prepare the work | 1.1 | Work health and safety (WHS) requirements, including personal protection needs, are observed throughout the work |
| | | 1.2 | Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition |
| | | 1.3 | Product purpose, furniture style and joint type are identified from workplace documentation |
| | | 1.4 | Tools, adhesives and fasteners are selected to match the joint type |
| 2 | Make joint | 2.1 | Cutting and joining lines are marked out to suit joint type |
| | | 2.2 | Measurements and calculations are checked for accuracy to ensure quality outcomes |

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|---|---|--|
| | 2.3 | Timber is joined in accordance with workplace requirements |
| | 2.4 | Fasteners and adhesives are used to make joints firm where required |
| | 2.5 | Finished joint is checked against quality requirements |
| 3 | Finalise operation and maintain equipment | |
| | 3.1 | Work area is cleaned, hand and/or power tools and equipment are cleaned, maintained and stored in accordance with workplace procedures |
| | 3.2 | Machinery is cleaned and left in a safe mode |
| | 3.3 | Faulty and/or defective equipment is tagged and reported in accordance with workplace practices |
| | 3.4 | Off-cuts and unused materials are collected and stored for re-use or disposal following workplace procedures |
| | 3.5 | 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.

Joints include:

- dowel
- mortise and tenon
- dovetail
- lap joint
- biscuit joint
- finger joint

Unit context includes:	• housing joint • mitre and bridle joints • WHS requirements, including legislation, building codes, material safety management systems, hazardous and dangerous goods codes, and local safe operating procedures or equivalent • work is carried out in accordance with legislative obligations, organisation insurance requirements, environment legislation, and manual handling procedures and relevant regulations
Tools and equipment include:	• chisels • mallets • mortise gauges • vernier calipers • vices • dovetail saws • tenon saws • coping saws • planes • files • hand drills • power drills • dowel jigs and power routers • portable biscuit machines • power planers • power saws and power sanders
Adhesives include:	• resorcinol formaldehyde • polyurethane • epoxy • cyanoacrylate
Timbers include:	• indigenous and overseas timbers
Workplace requirements include:	• visual appearance • tolerance • gaps or play in joints and strength
Quality requirements include:	• alignment • neatness • firmness and acceptable tolerances
Personal protective equipment includes:	• that prescribed under legislation, regulation and enterprise policies and practices

Information and procedures include:

- workplace procedures relating to the use and operation of tools
- production planning figures
- work instructions, including job sheets, plans, drawing and designs
- workplace procedures relating to reporting and communication
- manufacturer instructions for the use of equipment and materials

Unit Mapping Information

Supersedes and is equivalent to LMFFM2006B Hand make timber joints.

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 MSFFM2006 Hand make timber joints

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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:
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
 - minimise the risk of injury to self and others
- Select appropriate joint types for the furniture item and utilise at least three (3) different adhesive types
- Produce a minimum of four (4) different joint types in accordance with industry standards on tolerances with at least two (2) produced substantially by hand operations
- Use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- 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

- Characteristics, properties and selection criteria of adhesives used
- Capabilities and limitations of tools used
- Matching requirements of adhesives and fasteners to timbers/materials used
- Work flow in relation to the furniture items being made or repaired

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 tools, materials and equipment required to hand make timber joints.

Links

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