



Australian Government

MSFFM4002 Construct joints for custom furniture

Release: 1

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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. It includes adapting/designing joints that are compatible with the product material, purpose and style of the furniture and supports the attainment of skills and knowledge required for competent workplace performance in the wide variety of furnishing maker operations. The competency applies to a work room and on-site environment and involves application of skills and knowledge at a highly skilled craftsman or artisan level.

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 | Plan and prepare for work | 1.1 | Applicable work health and safety (WHS), legislative and organisational requirements relevant to constructing joints for custom furniture are verified and complied with |
| | | 1.2 | Instructions, plans and/or design briefs are read and interpreted to identify furniture joint requirements |
| | | 1.3 | 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 |
| | | 1.4 | Product purpose, furniture style and construction material are identified |
| | | 1.5 | Joints are identified and type of joint to be used is selected |

- and adapted/designed as necessary
- 1.6 Tools, adhesives and fasteners are selected to match the joint type
 - 1.7 Quality checking procedures are developed and documented for each step in the joint construction process
 - 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
 - 2.3 Timber features are identified and optimal usage criteria are observed
 - 2.4 Timber is cut to specification, inspected and prepared for joining
 - 2.5 Timber is joined in accordance with the job specifications
 - 2.6 Fasteners and adhesives are used to make joints firm where required
 - 2.7 Finished joint is checked against quality requirements
 - 3 Finalise the work sequence
 - 3.1 The product is prepared for finishing in accordance with the design specification
 - 3.2 Carving tools are cleaned, maintained and stored in accordance with manufacturer specification
 - 3.3 Work area is cleared and waste removed
 - 3.4 Workplace documentation and/or reports are completed

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 for custom furniture include:

- dowel
- mortise and tenon
- dovetail
- lap joint
- biscuit joint
- finger joint
- housing joint
- mitre or bridle joints

Tools and equipment include:

- chisels
- mallets
- mortise gauges
- vernier callipers
- vices
- dovetail saws
- tenon saws
- coping saws
- planes
- files
- hand and power drills
- dowel jigs
- power routers
- portable biscuit machines
- power planers
- power saws
- power sanders

Materials include:

- timber (both indigenous and overseas)
- adhesives
- fasteners

Adhesives include:

- resorcinol formaldehyde
- polyurethane
- epoxy
- cyanoacrylate

WHS requirements include:

- Commonwealth, state or territory legislation and regulations
- organisational safety policies and procedures
- the use of personal protective equipment and clothing
- firefighting equipment
- first aid equipment
- hazard and risk control and elimination of hazardous

- Procedures include:**
- materials and substances
 - manual handling, including lifting and carrying
 - work instructions
 - standard operating procedures
 - written, verbal or computer-based procedures
- Organisational requirements include:**
- legal, organisational and site guidelines, policies and procedures relating to own role and responsibility
 - quality assurance
 - procedural manuals
 - quality and continuous improvement processes and standards
 - ethical standards
 - recording and reporting
 - access and equity principles and practices
 - equipment use, maintenance and storage
 - environmental management (waste disposal, recycling and re-use guidelines)

Unit Mapping Information

Supersedes and is equivalent to LMFFM4006A Construct joints for custom furniture.

Links

Companion Volume implementation guides are found in VETNet -

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