



**Australian Government**

# **MSFFM4003 Produce curved and shaped components for custom furniture**

**Release: 1**

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## **Modification History**

Release 1 - New unit of competency

## **Application**

This unit of competency covers production of curved and shaped components for custom furniture in a wide variety of furniture maker operations. It 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.

- |   |                  |     |                                                                                                                                                                                                     |
|---|------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Prepare for work | 1.1 | Applicable work health and safety (WHS), legislative and organisational requirements relevant to the production of curved and shaped components for custom furniture are verified and complied with |
|   |                  | 1.2 | Instructions or plans are read and interpreted to identify process required to complete work tasks                                                                                                  |
|   |                  | 1.3 | Production materials are identified, evaluated and selected                                                                                                                                         |
|   |                  | 1.4 | Tools and equipment are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition                                                     |
|   |                  | 1.5 | Techniques for bending, forming and shaping components are identified, evaluated and selected for the particular                                                                                    |

|   |                            |                                                                                                                          |
|---|----------------------------|--------------------------------------------------------------------------------------------------------------------------|
|   |                            | applications                                                                                                             |
|   | 1.6                        | Sequence of work is planned, including the starting point, to ensure efficiency and quality of construction              |
|   | 1.7                        | Quality checking procedures are developed and documented for each step in the production process                         |
| 2 | Complete construction      |                                                                                                                          |
|   | 2.1                        | Component specifications are set out according to work instructions and materials marked according to industry practices |
|   | 2.2                        | Tools, machines and equipment are used in accordance with safety requirements and manufacturer specifications            |
|   | 2.3                        | Material bending, forming and shaping are undertaken in accordance with the production plan                              |
|   | 2.4                        | Components are checked against specified tolerances, fit and accuracy                                                    |
| 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.

**Curved components include:**

- curved timber components produced by:
  - laminating
  - coopering
  - steam bending
  - saw kerfing

**Shaped components include:**

- timber shaped by hand or static machine tools

**Instructions include:**

- workplace instructions regarding techniques, materials, tools and equipment required in the production of curved and shaped components for custom furniture
- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, specifications, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturer instructions for the use of equipment and materials

**Materials include:**

- timber
- plywood
- medium density fibreboard (MDF)
- veneer
- plastic laminate
- sheet metal
- adhesives
- screws
- nails
- dowels
- decorative finishes
- abrasive paper
- finishing materials

**Tools and equipment include:**

- measuring tapes or rules
- hammers
- mallets
- squares
- bevels
- chisels
- planes
- hand and power saws
- power drills/screwdrivers
- pneumatic tools, compressor and spray equipment

|                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                  | <ul style="list-style-type: none"><li>• clamps</li><li>• screwdrivers</li><li>• pincers</li><li>• rasps</li></ul>                                                                                                                                                                                                                                                                                                                                       |
| <b>Machines include:</b>                                         | <ul style="list-style-type: none"><li>• band saws</li><li>• cross-cut saws</li><li>• mitre saws</li><li>• panel and rip saws</li><li>• surface planers</li><li>• panel planers</li><li>• belt sanders</li><li>• horizontal borers</li><li>• vertical drill presses</li><li>• dove-tailers</li><li>• pedestal grinders</li><li>• wood-turning lathes</li><li>• veneer guillotines</li><li>• presses</li></ul>                                            |
| <b>Material bending, forming and shaping techniques include:</b> | <ul style="list-style-type: none"><li>• steam bending</li><li>• laminating</li><li>• coopering</li><li>• saw kerfing</li><li>• hand shaping</li><li>• machine shaping</li></ul>                                                                                                                                                                                                                                                                         |
| <b>WHS requirements include:</b>                                 | <ul style="list-style-type: none"><li>• Commonwealth, state or territory legislation and regulations</li><li>• organisational safety policies and procedures</li><li>• the use of personal protective equipment and clothing</li><li>• firefighting equipment</li><li>• first aid equipment</li><li>• hazard and risk control and elimination of hazardous materials and substances</li><li>• manual handling, including lifting and carrying</li></ul> |
| <b>Procedures include:</b>                                       | <ul style="list-style-type: none"><li>• work instructions</li><li>• standard operating procedures</li><li>• verbal, written or computer-based procedures</li></ul>                                                                                                                                                                                                                                                                                      |
| <b>Organisational requirements include:</b>                      | <ul style="list-style-type: none"><li>• legal, organisational and site guidelines, policies and procedures relating to own role and responsibility</li><li>• quality assurance</li><li>• procedural manuals</li><li>• quality and continuous improvement processes and standards</li><li>• ethical standards</li></ul>                                                                                                                                  |

- 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 LMFFM4007A Produce curved and shaped components 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>