



Australian Government

MSFFM4003 Produce curved and shaped components for custom furniture

Release: 1

MSFFM4003 Produce curved and shaped components for custom furniture

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

	• clamps • screwdrivers • pincers • rasps
Machines include:	• band saws • cross-cut saws • mitre saws • panel and rip saws • surface planers • panel planers • belt sanders • horizontal borers • vertical drill presses • dove-tailers • pedestal grinders • wood-turning lathes • veneer guillotines • presses
Material bending, forming and shaping techniques include:	• steam ending • laminating • coopering • saw kerfing • hand shaping • machine shaping
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 materials and substances • manual handling, including lifting and carrying
Procedures include:	• work instructions • standard operating procedures • verbal, written 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 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>

Assessment Requirements for MSFFM4003 Produce curved and shaped components for custom furniture

Modification History

Release 1 - New unit of competency

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
- Produce a minimum of six (6) significant timber curved components, five (5) from solid timber and one (1) using ply:
 - one (1) involving shaping from solid timber using hand techniques
 - one (1) involving shaping from solid timber using machine techniques
 - one (1) involving laminating
 - one (1) involving use of heat/steam
 - one (1) involving other techniques
 - items must demonstrate appropriate design, use of materials and strength for purpose
- Conduct operator maintenance on machines and related tools and equipment
- Use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate other 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

- State or territory WHS legislation, regulations, standards and codes of practice relevant to the production of curved and shaped components for custom furniture
- Organisational and site standards, requirements, policies and procedures for the production of curved and shaped components for custom furniture
- Techniques for timber bending, forming and shaping
- Types, characteristics, uses, limitations and maintenance requirements of solid timbers commonly used in furniture production

- Types, characteristics, uses and limitations on hand and power tools used in timber bending, forming and shaping
- Interpretation of plan representations of furniture design
- Techniques for the preparation of drawings/set-outs/rods and geometrical concepts
- Environmental protection requirements
- Established communication channels and protocols
- Relevant problem identification and resolution
- Work flow within the workplace

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 realistic curved and shaped component tasks, materials and equipment relevant to production of curved and shaped components for custom furniture, and specifications and work instructions.

Links

Companion Volume implementation guides are found in VETNet -

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