



Australian Government

MSFFM4004 Produce timber veneered components for custom furniture

Release: 1

MSFFM4004 Produce timber veneered components for custom furniture

Modification History

Release 1 - New unit of competency

Application

This unit of competency covers production of timber veneered components for custom-made furniture in a wide variety of fine wood operations. It applies to a workshop environment and involves application of skills and knowledge at a 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 producing timber veneered components for custom-made furniture are complied with
		1.2	Instructions, plans or design briefs are read and interpreted to identify processes and materials to complete work tasks
		1.3	Suitable timber or timber veneer material is identified, evaluated and selected
		1.4	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
		1.5	Sequence of work is planned and documented, including the starting point, to ensure efficiency and quality of finish

		1.6	Quality checking procedures are developed and documented for each step in the veneering process
2	Prepare timber veneer	2.1	Timber is selected and the cutting face is prepared
		2.2	Veneer timber is cut along grain at the specified thickness
		2.3	Veneer thickness and consistency are monitored with respect of size and tolerances
		2.4	Veneer is dressed to the required tolerances for further use
3	Lay out and prepare materials	3.1	Design of veneer is laid out
		3.2	Veneers are selected and checked for flaws
		3.3	Veneers are matched and method of joining to adjacent veneers is selected and prepared for
		3.4	Veneers are prepared for application and laid out
		3.5	Suitable joining processes to backing and adjacent veneers are selected and prepared
		3.6	The style of edge finish is selected and prepared for
4	Apply and/or fit and finish	4.1	Veneers are measured, marked and cut to size, and applied to base material
		4.2	Adhesives are applied according to workplace procedures and manufacturer instructions
		4.3	Selected joining process is applied in accordance with workplace procedures, including the use of protective equipment
		4.4	Final trim and finishing are completed to specifications
		4.5	Work is checked against required quality standards
		4.6	Any non-conformity with the required quality standard is rectified
5	Finalise the work sequence	5.1	The product is prepared for finishing in accordance with the design specification
		5.2	Carving tools are cleaned, maintained and stored in accordance with manufacturer specification

- 5.3 Work area is cleared and waste removed
- 5.4 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.

Veneered components include:

- thin slices of wood, usually thinner than 3 mm (1/8"0 glued and pressed onto core panels of different material, including:
 - wood
 - particleboard
 - medium density fibreboard (MDF)
- veneers are also used in parquetry, marquetry, intarsia and inlays

Instructions include:

- workplace veneering 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

Tools and equipment include:

- knives
- chisels
- measuring tapes or rules
- mallets
- squares
- levels
- planes
- band saws

	• rotary lathe • slicing machine • half round lathe • power saws • power drills/screwdrivers • hand drills • pneumatic tools, compressor and spray equipment • clamps • screwdrivers • rollers • laminate trimmers • cutters and hand routers • sandpaper • wire wool • sanding block
Materials include:	• timber • manufactured board • laminates • timber strips • adhesives • cleaning materials • tapes
Veneers include:	• two or more layers of veneer adhered to each other and referred to as laminates employed to provide: • structured strength or shape (e.g. the back of a chair) that also has visual appeal • applied to a laminate of different material for visual appeal whilst maintaining other structural benefits
Suitable joining processes include:	• mechanical press that uses two flat plates being brought together to press the veneer to the substrate during the gluing process either purely mechanical using a screw or level action or closed with a hydraulic ram. This method is only used for veneering flat surfaces • vacuum technique involving the component being veneered being placed in a form of bag from which the air is extracted. This method is favoured for veneering curved surfaces and also by smaller operators because of its flexibility • hot glue hammering that is a traditional method of veneering involving using hot glue on the surfaces being veneered and then hammering the veneer to the subsurface with a hammer
Joining to adjacent	• butting two right angle edges together then ‘stitching’ the

veneers includes:	veneer using a hot melt glue or tape (commonly used for flat surfaces) • using a scarf joint then gluing the surfaces together (commonly used on curved surfaces)
Style and edge finish include:	• solid timber • veneer to cover the exposed edge
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 • 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 LMFFM4008A Produce timber veneered 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 MSFFM4004 Produce timber veneered components for custom furniture

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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
- Prepare a minimum of one(1) significant veneer, including:
 - the selection of materials
 - the preparation of the cutting face
 - the cutting and dressing of the veneer
- Apply and finish veneers to at least three (3) different surfaces, including one (1) flat, one (1) curved and one (1) being a laminate, including at least two (2) requiring veneer edging
- 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 timber veneer components
- Organisational and site standards, requirements, policies and procedures for the production of timber veneer components
- Types, characteristics, uses and limitations of veneers
- Techniques for the manufacture and application of veneers
- Types, characteristics, uses and limitations of different veneering timbers
- Interpretation of plan representations of furniture design
- The preparation of drawings/set-outs

- Types, characteristics, uses and limitations of tools and equipment and procedures for their safe use, operation and maintenance
- Work flow in relation to furniture production
- Environmental protection requirements
- Established communication channels and protocols
- Relevant problem identification and resolution

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 tasks related to the application of veneers, materials and equipment relevant to the production and application of veneers, and specifications and work instructions.

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