



Australian Government

MSFFDT4015 Produce templates and jigs for custom-made furniture

Release: 1

MSFFDT4015 Produce templates and jigs for custom-made furniture

Modification History

Release 1 - New unit of competency

Application

This unit of competency covers producing templates and jigs for custom-made furniture in a wide variety of fine woods operations. It 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 design and technology

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 templates and jigs for custom-made furniture
		1.2	Instructions, plans or design briefs are read and interpreted to identify processes and materials required to complete work tasks
		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	Sequence of work is planned and documented, including the starting point, to ensure efficiency and quality outcomes
		1.5	Quality checking procedures are developed and

			documented for each step in the process
2	Plan for the production of templates or patterns	2.1	Size requirements are checked in relation to the production process and finishing capacity of the workplace
		2.2	Material for pattern or template is identified for approximate size and characteristics
		2.3	Procedures for using pattern development instruments and tools are checked and equipment is prepared for use
		2.4	Each dimension is measured, exploded and plotted maintaining appropriate angles, arcs and curves
		2.5	Visual inspection and measurements are used to compare pattern dimensions and shapes with drawings and specifications
3	Complete templates or patterns	3.1	Equipment and tools are used following normal workplace procedures
		3.2	Pattern or template is completed ensuring that the pattern indicates completion date and original drawing details
		3.3	Required workplace approval of pattern or template is obtained
		3.4	Plans are marked with notations for workplace requirements, including authorship, process or customer requirements, authorisation and any review dates
		3.5	Plans are copied and filed, as required, according to workplace policies and procedures
4	Design and construct jig for custom-made furniture	4.1	Design of proposed jig or fixture is produced
		4.2	Production process incorporating jig is planned
		4.3	Tools and equipment are used following normal workplace procedures
		4.4	Jig is constructed in accordance with design and within tolerances
		4.5	Jig is used to produce prototype to ascertain its adherence to set tolerances and to assess its match to original design

		4.6	Jig is adjusted as required to meet requirements for custom-made furniture design
5	Complete housekeeping	5.1	Unused materials are stored or recycled as required
		5.2	Tools and equipment are cleaned, maintained and stored appropriately
		5.3	Faulty or defective equipment is tagged and reported in accordance with workplace practices
		5.4	Work area is cleaned and rubbish disposed of appropriately
		5.5	Workplace documentation is 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.

- Unit context includes:**
- 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, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements
 - work requires individuals to demonstrate conceptual and analytical ability, discretion, judgement and problem solving
 - customers or suppliers may be internal or external

Instructions include:	• workplace procedures relating to the use and operation of tools and equipment • production planning figures • 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
Tools and equipment include:	• computer numerically controlled (CNC) machines • static woodworking machines • relevant hand tools • routers • spindle moulders • panel saws • copy shapers • radial arm saws
Materials include:	• manufactured board • solid timbers • composite materials
Personal protective equipment includes:	• that prescribed under legislation, regulations and enterprise policies and practices
Information and procedures include:	• work procedures/instructions • manufacturer specifications and instructions • standard forms of workplace process and procedures • organisation work specifications and requirements • legislation, regulations and codes of practice • quality and Australian Standards and procedures

Unit Mapping Information

Supersedes and is equivalent to LMFFDT4018A Produce templates and jigs for custom made 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 MSFFDT4015 Produce templates and jigs for custom-made furniture

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Performance Evidence

- Collect, organise and understand information related to furnishing work instructions and work orders and safety procedures
- Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- Identify materials used in the work process
- Follow work instructions, operating procedures and inspection processes to:
 - minimise the risk of injury to self or others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- Prepare a minimum of two (2) templates and two (2) jigs for custom-made furniture
- Use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- Lead others and work effectively to improve production quality and outcomes
- 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
- Use workplace technology related to the coordination, including communication equipment, time and management aids and other measuring devices
- 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 and encourage participation of employees in the planning of work activities and changes

Knowledge Evidence

- State or territory WHS legislation, regulations, standards and codes of practice relevant to the production of templates and jigs
- Organisational and site standards, requirements, policies and procedures for the production of templates and jigs
- Types, characteristics, uses and limitations of templates and jigs
- Techniques for the manufacture and application of templates and jigs
- The interpretation of plan representation 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, equipment, materials and specifications for the production of jigs and templates for custom-made furniture.

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