



Australian Government

Department of Education, Employment and Workplace Relations

LMFFDT4018A Produce templates and jigs for custom made furniture

Revision Number: 1

LMFFDT4018A Produce templates and jigs for custom made furniture

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the skills and knowledge required to produce templates and jigs for custom made furniture.
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Application of the Unit

Application of the unit	This unit supports the attainment of skills and knowledge required for competent workplace performance in the wide variety of fine woods operations. The competency applies to a workshop environment and involves application of skills and knowledge at a craftsman or artisan level. These skills and knowledge are to be used within the scope of the individual's job and authority. This unit requires employability skills in initiative and enterprise, planning and organising and problem solving in order to produce templates and jigs for custom made furniture. Communication skills are used to access and interpret work requirements and self management is applied to ensure project requirements are met. Technology skills are applied to use and produce these tools.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for work	1.1. Applicable legislative, OHS 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 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

ELEMENT	PERFORMANCE CRITERIA
	4.4. Jig is constructed as per 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

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise work flow and productivity
- use pre-checking and inspection techniques to anticipate production problems to avoid re-work and wastage
- recognise and respond to circumstances outside instructions or personal competence
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, work flow interruptions or wastage
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate other material requirements
- clarify and confirm work instructions
- plan work within given task parameters
- accept responsibility for given tasks
- set, monitor and satisfy personal work goals
- satisfy the competency requirements for the job
- maintain current knowledge of tools and materials
- seek learning opportunities
- use workplace technology related to the production of templates, patterns and jigs, including tools, equipment, calculators and measuring devices.

Required knowledge

- State or Territory OHS 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

REQUIRED SKILLS AND KNOWLEDGE

- environmental protection requirements
- established communication channels and protocols
- problem identification and resolution.

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the relevant Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- Comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for producing templates and jigs
- 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 two templates and two jigs for custom furniture
- Work effectively with others
- Modify activities to cater for variations in workplace contexts and environment

Context of, and specific resources for assessment

- The application of competency is to be assessed in the workplace or simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace
 - realistic task for the preparation/production of a veneer
 - realistic tasks related to the application of veneers
 - materials and equipment relevant to the production and application of veneers
 - specifications and work instructions

Method of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Furnishing Industry Training Package

EVIDENCE GUIDE	
	• Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge • Assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application • Assessment may be applied under project related conditions (real or simulated) and require evidence of process • Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances • Assessment may be in conjunction with assessment of other related units of competency
Guidance information for assessment	

Range Statement

RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Legislative requirements	- are to be in accordance with applicable legislation from all levels of government that affect organisational operation - requirements may include but not be limited to award and enterprise agreements, industrial relations, Australian Standards, confidentiality and privacy, OHS, the environment, equal opportunity, anti-discrimination, relevant industry codes of practice, duty of care and heritage
OHS requirements	- are to be in accordance with Commonwealth, State or Territory legislation and regulations, organisational safety policies and procedures - requirements may include but not be limited to the use of personal protective equipment and clothing, fire fighting equipment, first aid equipment, hazard and risk control and elimination, control of hazardous materials and substances, manual handling, including lifting and carrying
Organisational requirements	may include but not be limited to 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, OHS, emergency and evacuation, 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)
Instructions	may include but not be limited to workplace instructions including job sheets, plans, specifications, drawings and designs, workplace procedures relating to reporting and communications, and manufacturer instructions for the use of equipment and materials
Tools and equipment	may include but not be limited to computer numeric controlled machines, static woodworking machines and relevant hand tools, routers, spindle moulders, panel saws, copy shapers and radial arm saws
Materials	may include but not be limited to manufactured board, solid timbers and composite materials

Unit Sector(s)

Unit sector	Furniture design and technology.
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		