



Australian Government

LMFDN4003B Produce patterns and/or templates

Revision Number: 1

LMFDN4003B Produce patterns and/or templates

Modification History

Not applicable.

Unit Descriptor

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| Unit descriptor | This unit covers the development of patterns and/or templates for production processes. |
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Application of the Unit

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| Application of the unit | |
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

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| Prerequisite units | |
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Employability Skills Information

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

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| <p>Elements describe the essential outcomes of a unit of competency.</p> | <p>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</p> |
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Elements and Performance Criteria

| ELEMENT | PERFORMANCE CRITERIA |
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| 1. Prepare for and dimension the task | 1.1. Workplace health and safety requirements, including personal protection needs, are observed throughout the work 1.2. Customer orders are interpreted to establish required sizes of finished products 1.3. Size requirements are checked in relation to the production process and finishing capacity of the workplace |
| 2. Plan process | 2.1. Material for pattern or template is identified for approximate size and characteristics 2.2. Required instruments and equipment are identified, located and assembled 2.3. Drawings and related specifications are interpreted 2.4. Procedures for using pattern development instruments and tools are checked and equipment is prepared for use |
| 3. Plot dimensions | 3.1. Equipment and tools are used following normal workplace procedures 3.2. Each dimension is measured, exploded and plotted maintaining appropriate angles, arcs and curves 3.3. Visual inspection and measurements are used to compare pattern dimensions and shapes with drawings and specifications |
| 4. Complete pattern or template | 4.1. Pattern or template is completed ensuring that the pattern indicates completion date and original drawing details 4.2. Required workplace approval of pattern or template is obtained 4.3. Plans are marked with notations for workplace requirements, including authorship, process or customer requirements, authorisation and any review dates 4.4. Plans are copied and filed as required according to workplace policies and procedures |

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- research, collect, organise and understand information related to pattern and template production, including the relevant technical, regulatory, environmental and safety requirements
- communicate ideas and information to enable clarification of the requirements, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment, systems and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and dimensions, create accurate patterns and templates and estimate material requirements
- create and apply systematic problem solving techniques to anticipate pattern and template production problems, avoid re-working and avoid wastage
- use the workplace technology related to pattern and template production, including production tools and equipment, calculators and measuring devices and computing/computer-aided systems

Required knowledge

- company operating procedures, including procedures for pattern and/or template production
- types, characteristics uses and limitations of pattern/template materials
- operation requirements of equipment and work systems in own work area
- competency requirements of the work activities
- relevant regulatory requirements, recognised standards and codes, and industry practices

Evidence Guide

| EVIDENCE GUIDE | |
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| <p>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.</p> | |
| <p>Critical aspects of evidence</p> | <ul style="list-style-type: none"> • Locate, interpret and apply relevant information • Apply safety requirements throughout the work sequence, including the use of personal protective clothing and equipment • Interpret drawings and extrapolate to physical dimensions • Select appropriate mediums and materials • Produce a minimum of three patterns or templates making use of: <ul style="list-style-type: none"> • manufactured board • solid timber • composite material • Suggest improvements to pattern and template production and where authorised, negotiate changes • Modify activities to cater for variations in workplace cultures and environment |
| <p>Resource implications</p> | <p>Drawings, job specifications, tools and equipment, information on production/fabrication process, production materials and relevant computer equipment and software.</p> |
| <p>Method of assessment</p> | <p>Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.</p> <p>Assessment should be by direct observation of tasks and/or samples of work and questioning on underpinning knowledge.</p> <p>Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.</p> |
| <p>Context of assessment</p> | <p>Assessment may occur on the job or in a workplace simulated facility with relevant equipment, simulated work instructions and deadlines.</p> |

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.

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| Unit scope | <ul style="list-style-type: none"> This unit covers the work involved in producing patterns and/or templates of products from drawings Patterns and/or templates are to be produced by hand, by using appropriate tools and equipment and by computer assisted production |
| Unit context | <ul style="list-style-type: none"> OHS legislation, building codes, material safety management systems, hazardous substances and dangerous goods codes and safe operating procedures Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, authorised handling procedures and organisation insurance requirements Work requires individuals to demonstrate conceptual ability, discretion, judgement and problem solving skills in the production of patterns or templates |
| Workplace environment | <ul style="list-style-type: none"> Work may be conducted in any of the enterprises of the sectors which form part of the furnishing industry Work is generally performed with little external assistance and with minimal supervision or direction The development of patterns and/or templates is undertaken in accordance with established enterprise procedures and practices Customers may be internal or external |
| Tools and equipment are to include: | <ul style="list-style-type: none"> computer numeric controlled machines static woodworking machines and relevant hand tools |
| Materials are to include: | <ul style="list-style-type: none"> manufactured board solid timbers and composite materials |
| Personal protective equipment | Personal protective equipment is to include that prescribed under legislation, regulations and enterprise policies and practices |
| Information and procedures | <ul style="list-style-type: none"> Work organisation procedures and practices relating to the production of patterns and/or templates Designer/drawer specifications and instructions |

RANGE STATEMENT

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| | <ul style="list-style-type: none">• Legislation/regulations/codes relevant to the work undertaken• Furniture production techniques and criteria, including ergonomic requirements• Quality and Australian standards and procedures |
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Unit Sector(s)

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| Unit sector | Furnishing Design |
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Co-requisite units

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| Co-requisite units | |
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Functional area

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| Functional area | |
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