



Australian Government

Department of Education, Employment and Workplace Relations

LMFDN4003A Produce patterns and/or templates

Release: 1

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Modification History

Not applicable.

Unit Descriptor

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

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

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Element	Performance Criteria
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

Not applicable.

Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

Critical aspects of evidence

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:

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.

Underpinning 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.

Underpinning skills

Information. Research, collect, organise and understand information related to pattern and template production, including the relevant technical, regulatory, environmental and safety requirements.

Communication. Communicate ideas and information to enable clarification of the requirements, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems.

Planning. 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.

Teamwork. Work with others and in a team by recognising dependencies and using co-operative approaches to optimise workflow and productivity.

Mathematical ideas and techniques. Use mathematical ideas and techniques to correctly complete measurements, calculate area and dimensions, create accurate patterns and templates and estimate material requirements.

Solve problems. Create and apply systematic problem solving techniques to anticipate pattern and template production problems, avoid reworking and avoid wastage.

Use of technology. Use the workplace technology related to pattern and template production, including production tools and equipment, calculators and measuring devices and computing/computer-aided systems.

Resource implications

Drawings, job specifications, tools and equipment, information on production/fabrication process, production materials and relevant computer equipment and software.

Method of assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and/or samples of work and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

Context of assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, simulated work instructions and deadlines.

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Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit.

Unit scope

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

OH&S requirements include:

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

The 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

Tools and equipment are to include:

computer numeric controlled machines

static woodworking machines, and

relevant hand tools.

Materials

Materials are to include:

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

Work organisation procedures and practices relating to the production of patterns and/or templates.

Designer's/drawer's specifications and instructions.

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)

Not applicable.