



Australian Government

Department of Education, Employment and Workplace Relations

LMTTF2010A Lay out and mark out canvas or sail materials

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor This unit covers the skills and knowledge required to lay out and mark out materials for the manufacture of canvas or sail products.

Application of the Unit

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This unit applies to laying out and marking out. Work may involve interaction with other people in the workplace including supervisors and production personnel. Work conducted in a variety of environments, such as:

- operational indoor workplaces
- operational outdoor workplaces

Work may be conducted in small to large scale enterprises and may involve individual and team activities. Work is performed within defined procedures under direct supervision.

The application of this unit is according to OHS practices of the enterprise and workplace practices, which may include:

- requirements prescribed by legislation, awards, agreements and conditions of employment
- standard operating procedures
- work instructions
- oral, written and visual communication
- quality practices, including responsibility for maintenance of own work quality and contribution to quality improvement of team or section output
- housekeeping
- tasks related to environmental protection, waste disposal, pollution control and recycling

This unit requires the application of skills associated with planning and organising to ensure canvas or sail material layout provides for maximum productivity. This unit also requires an ability to interpret and communicate job related information, check the quality of outcomes and identify and address problems relating to own work. Self management skills are applied to ensure workplace and quality standards are achieved.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Prepare for laying out and marking out processes	1.1 Specifications, drawings, sketches or diagrams are analysed to determine task requirements 1.2 Amount of floor or table space required to lay out material is determined 1.3 Equipment needed for laying and marking out is selected and set up for use 1.4 Steps in laying and marking out processes are determined and sequenced for maximum productivity 1.5 Adequate lighting is provided for the laying and marking out processes 1.6 Workplace procedures and instructions are read and interpreted
2 Lay out material	2.1 Obstructions and debris are removed from around work area, and work table or work surface is cleaned 2.2 Material is obtained and safely moved to the work area 2.3 Materials is rolled or spread out on to the work table or work surface 2.4 Material is layered according to requirements 2.5 Material is anchored to prevent movement using appropriate devices and OHS work practices 2.6 Templates (if used) are placed in position 2.7 Knowledge of laying out processes are applied to perform required tasks
3 Mark out required shapes and features	3.1 Datum point is established 3.2 Required shapes are plotted and marked out using manual or electronic processes 3.3 Allowances are made for seams, joins, reinforced edges and other design features 3.4 Positions of openings, inserts, gussets, reinforcing, attachments and other components are plotted and marked 3.5 Mark out process maximises material utilisation and minimises waste
4 Use plotting table	4.1 Plotting table vacuum is checked to ensure it reaches specified value 4.2 Material is laid out on table and checked to ensure it is free of creases, folds or other conditions that would prevent it lying flat 4.3 Plotter slide is checked for smooth travel 4.4 Appropriate software program is initiated 4.5 Data required by software program is loaded or keyed in 4.6 Plotting processes are performed

ELEMENT**PERFORMANCE CRITERIA**

4.7 Vacuum is released on completion of plotting process

4.8 OHS work practices are employed when using plotter

Required Skills and Knowledge

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

Demonstrates knowledge of:

- measuring instruments and techniques
- mathematical processes, geometry and geometrical shapes
- engineering drawing principles and practices
- lay out and mark out principles and practices
- product construction processes
- environmental requirements of relevant industry and workplace procedures
- general industry housekeeping policies and procedures
- OHS practices, including hazard identification and control measures
- quality practices
- workplace practices
- recording and reporting practices

Demonstrates skills to:

- interpret drawings, diagrams, sketches and specifications
- select and use appropriate marking out tools and equipment
- handle materials to be marked out
- measure lay out and mark out accurately
- read, interpret and follow information on work specifications, standard operating procedures and work instructions and other reference material
- maintain accurate records
- communicate within the workplace
- sequence operations
- meet specifications
- clarify and check task-related information
- carry out work according to OHS practices

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 Training Package.

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

Demonstrates skills and knowledge to:

- comply with all relevant safety requirements including safe use of tools and equipment used in handling materials, laying out and marking out
- interpret work orders
- interpret drawings, diagrams and sketches defining the design to be marked out
- interpret dimensions and other relevant specifications of components to be incorporated in marked out design
- use plotting table and associated computer equipment
- apply lay out and mark out techniques over a range of operations
- perform normal operator maintenance of work area to enable work to be conducted safely and efficiently
- document and communicate work related information

Consistently applies skills and knowledge when:

- organising work
- completing tasks
- identifying improvements
- using workplace practices
- using OHS practices
- recording and reporting accidents and incidents
- assessing operational readiness of equipment used and work processes
- recognising and adapting to cultural differences in the workplace, including modes of behaviour and interactions
- completing work systematically with attention to detail without damage to goods and equipment

Context and specific resources for assessment

Assessment may occur on the job or in an appropriately simulated environment and requires access to work areas, materials and equipment, and to information on workplace practices and OHS practices.

Guidance information for assessment

This unit may be assessed independently or in combination with other relevant units.

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, if used 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/regulatory requirements	All work must comply with relevant Federal and State or Territory legislative or regulatory requirements.
Materials may include	• fibres and yarns used in canvas and sail making • ropes • dacron, nylon and composite sailcloths
OHS practices	OHS practices must include hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit, and may include: • manual handling techniques • standard operating procedures • personal protective equipment • safe materials handling • taking of rest breaks • ergonomic arrangement of workplaces • following marked walkways • safe storage of equipment • housekeeping • reporting accidents and incidents • other OHS practices relevant to the job and enterprise

Unit Sector(s)

Sector	Textile Fabrication
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