



Australian Government

MSTTF2010 Lay out and mark out canvas or sail materials

Release: 1

MSTTF2010 Lay out and mark out canvas or sail materials

Modification History

Release 1. Supersedes and is equivalent to LMTTF2010A Lay out and mark out canvas or sail materials

Application

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

Work may involve interaction with other people in the workplace, including supervisors and production personnel. Work may be conducted in operational indoor or 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.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Textile fabrication

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Determine job requirements	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Use appropriate personal protective equipment (PPE) in accordance with SOPs
		1.4	Identify job requirements from specifications, drawings, job sheets or work instructions

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| 2 | Prepare for laying out and marking out processes | <ul style="list-style-type: none">2.1 Analyse specifications, drawings, sketches or diagrams to determine task requirements2.2 Determine amount of floor or table space required to lay out material2.3 Select and set up equipment needed for laying and marking out2.4 Determine and sequence steps in laying and marking out processes for maximum productivity2.5 Ensure there is adequate lighting for the laying and marking out processes2.6 Apply workplace procedures and instructions |
| 3 | Lay out material | <ul style="list-style-type: none">3.1 Remove obstructions and debris from around work area, and clean work table or work surface3.2 Move material to the work area and spread out onto the work table or work surface3.3 Layer material according to requirements and anchor to prevent movement using appropriate devices and WHS work practices3.4 Place templates in position, if used |
| 4 | Mark out required shapes and features | <ul style="list-style-type: none">4.1 Interpret dimensions and other relevant specifications and establish datum point4.2 Plot and mark out required shapes using manual or electronic processes to maximise use of material and minimise waste4.3 Make allowances for seams, joins, reinforced edges and other design features4.4 Plot and mark positions of openings, inserts, gussets, reinforcing, attachments and other components |

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| 5 | Use plotting table | 5.1 | Check plotting table vacuum to ensure it reaches specified value |
| | | 5.2 | Lay out material on table and check to ensure it is free of creases, folds or other conditions that would prevent it lying flat |
| | | 5.3 | Check plotter slide for smooth travel |
| | | 5.4 | Initiate appropriate software program and load or key in data required by software program |
| | | 5.5 | Perform plotting processes and apply WHS practices |
| | | 5.6 | Release vacuum when plotting process is complete, and complete relevant documentation |

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for 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.

Workplace procedures include one or more of the following:

- requirements prescribed by legislation, awards, agreements and conditions of employment
- SOPs
- 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
- WHS practices

Australian Standards include:	• the relevant industry or Australian Standards that are current at the time this unit is being undertaken
Materials include one or more of the following:	• fibres and yarns used in canvas and sail making • ropes • dacron, nylon and composite sail cloths
WHS practices	WHS practices include hazard identification and control, risk assessment and implementation of risk reduction measures specific to the tasks described by this unit, and include one or more of the following: • manual handling techniques • SOPs • PPE • safe materials handling • taking of rest breaks • ergonomic arrangement of workplaces • following marked walkways • safe storage of equipment • housekeeping • reporting accidents and incidents • environmental practices

Unit Mapping Information

Release 1. Supersedes and is equivalent to LMTTF2010A Lay out and mark out canvas or sail materials

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a203ec5c-de7d-406b-b3e1-8f1a9b76e92e>

Assessment Requirements for MSTTF2010 Lay out and mark out canvas or sail materials

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria, and include:

- reading and following work instructions, standard operating procedures (SOPs), safe work practices and other reference material
- applying relevant standards
- complying with all relevant safety requirements, including safe use of tools and equipment used in handling materials, laying out and marking out
- interpreting work orders
- interpreting drawings, diagrams and sketches defining the design to be marked out
- interpreting dimensions and other relevant specifications of components to be incorporated in marked out design
- plotting and marking out required shapes using manual or electronic processes to maximise use of material, minimise waste, and make allowances for seams, joins, reinforced edges and other design features
- using plotting table and associated computer equipment according to workplace procedures
- applying all required lay out and mark out techniques, on at least two (2) occasions, according to workplace requirements
- performing normal operator maintenance of work area to enable work to be conducted safely and efficiently
- documenting and communicating work-related information.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- relevant Australian Standards
- measuring instruments and techniques
- mathematical processes, geometry and geometrical shapes
- engineering drawing principles and practices
- computer and appropriate software for sail making
- lay out and mark out principles and practices
- product construction processes

- work health and safety (WHS) and environmental requirements of relevant industry and workplace procedures
- general industry housekeeping policies and procedures
- quality practices
- maintaining records
- workplace procedures.

Assessment Conditions

- Assessors must:
 - satisfy the assessor competency requirements that are in place at the time of the assessment, as set by the VET regulator
 - have vocational competency in lay out and mark out canvas or sail materials, at least to the level being assessed, with relevant industry knowledge and experience.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.

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