



Australian Government

MSTTF3012 Cut and join sail panels

Release: 1

MSTTF3012 Cut and join sail panels

Modification History

Release 1. Unit code and Application changed. Elements and Performance Criteria simplified with Element 1 and 2 combined. Foundation Skills field populated. Range of Conditions removed with relevant information moved to Knowledge Evidence. Assessment Requirements clarified with generic foundation skills statements moved to appropriate section and duplication with Performance Criteria removed. Supersedes and is equivalent to MSTTF3006 Cut and join sail panels.

Application

This unit describes the skills and knowledge required to lay-up, mark and cut sail panels using manual methods. The joining of panels involves sewing and bonding techniques. Interpretation of sail designs and specification sheets is required.

This unit applies to individuals working in accordance with established procedures and under the supervision of the sail designer.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Competency Field

Textile fabrication

Elements and Performance Criteria

Elements	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 Identify job requirements from work documentation and establish sail design specifications 1.2 Identify and comply with work health and safety requirements
2. Lay up, plot and mark sail	2.1 Check and confirm sail cloth width and quality against lay-up instructions 2.2 Plot lay marker on the sail cloth using manual techniques and copy mark on the sail cloth 2.3 Check marker and lay alignment against design specifications and make any required adjustments 2.4 Store master copy of lay marker in accordance with workplace

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	procedures
3. Cut sail	3.1 Lay out sail cloth using safe manual handling techniques 3.2 Check sail cloth for faults or inconsistencies and take appropriate action 3.3 Obtain and check cutting equipment for safety and serviceability prior to use 3.4 Cut sail cloth in accordance with work health and safety requirements and workplace procedures 3.5 Inspect cut sail cloth, identify any faults and take appropriate action to ensure cut pieces meet required quality standards and design specifications
4. Join sail panels	4.1 Identify required joining technique according to design and sail specifications, and prepare work area and resource requirements 4.2 Prepare, align, anchor or otherwise stabilise sail cloth surfaces for application of adhesive or sewing 4.3 Join sail panels according to design specifications 4.4 Monitor joining continuously for errors and to ensure correct alignment and integrity to design specifications 4.5 Allow bonded joins to cure for specified time
5. Finalise work	5.1 Remove sail and inspect bonded or sewn joins, and test for strength and accuracy against design specifications 5.2 Identify and address faults and inconsistencies or discrepancies with design 5.3 Transfer sail to next area for finishing, and complete housekeeping and required production documentation in accordance with workplace procedures 5.4 Clean work area, clean and return tools and equipment to safe storage, and perform routine basic maintenance, in accordance with workplace requirements and manufacturer specifications

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Reading skills to interpret sail design specifications
- Writing skills to communicate factual information in familiar workplace documents
- Numeracy skills to take accurate measurements and use basic geometry and geometric drawing.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSTTF3006 Cut and join sail panels.

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 MSTTF3012 Cut and join sail panels

Modification History

Release 1. Unit code and Application changed. Elements and Performance Criteria simplified with Element 1 and 2 combined. Foundation Skills field populated. Range of Conditions removed with relevant information moved to Knowledge Evidence. Assessment Requirements clarified with generic foundation skills statements moved to appropriate section and duplication with Performance Criteria removed. Supersedes and is equivalent to MSTTF3006 Cut and join sail panels.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- cut and join at least three different sail types or three sails of different sizes to specifications and workplace quality standards using each of the following methods at least once:
 - sewing
 - adhesive bonding.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- current Australian Standards for sailmaking and their basic requirements
- work health and safety requirements including:
 - use of personal protective equipment (PPE)
 - safe manual handling techniques for sailcloth
 - hazard identification and control measures
- environmental and waste-management requirements of sail making industry
- sail types for various uses and boat sizes
- sail cloths commonly used in sail making, and their performance factors
- tools and equipment used for cutting and joining sail panels
- manual plotting and marking techniques
- cross-cut, radial and membrane panel layouts
- operating principles of sewing machines used
- needle, thread and stitch specifications
- adhesives used in sail making, and practices and procedures for application
- curing requirements
- procedures for strength testing of joined sail cloth
- documentation requirements for sail production:

- record of inconsistencies or faults
- record of adhesives, materials and processes used
- instructions for finishing
- time and date
- labelling
- packing or transfer information.
-

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - sail design specifications
 - sail cloth
 - cutting and joining tools, equipment and materials
 - workplace procedures.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

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