



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **MEM25007B Maintain marine vessel surfaces**

**Release: 1**

## **MEM25007B Maintain marine vessel surfaces**

### **Modification History**

Not Applicable

## Unit Descriptor

<b>Unit descriptor</b>	This unit covers performing cosmetic maintenance/repair of surfaces, including fibre reinforced plastics, timber and metal surfaces.
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## Application of the Unit

<b>Application of the unit</b>	<p>This unit applies to cosmetic maintenance and repair practices used in the marine industry.</p> <p>Cosmetic maintenance and repair practices apply across a range of timber, fibre reinforced plastics and metal materials.</p> <p>Work involves routine maintenance-related inspection of hull and superstructure sectors, surfaces and fittings.</p> <p>A range of hand held tools, equipment and materials is used to suit specific maintenance/repair requirements.</p> <p>Where repair of marine surfaces and structures is carried out, Unit MEM25008C (Repair marine vessel surfaces and structures) should be selected.</p> <p>Where slipping is required, or when working on a slipped craft, Unit MEM25014B (Perform marine slipping operations) should also be selected.</p> <p>Relevant units related to specific applications and materials should also be selected as required.</p> <p><b>Band: A</b></p> <p><b>Unit Weight: 4</b></p>
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## Licensing/Regulatory Information

Not Applicable

## Pre-Requisites

<b>Prerequisite units</b>		
<b>Path 1</b>	MEM13003B	Work safely with industrial chemicals and materials
	MEM18001C	Use hand tools
	MEM18002B	Use power tools/hand held operations

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	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.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Inspect vessel and identify maintenance/repair requirements	1.1.Sectors, surfaces and fittings requiring inspection are identified. 1.2.Condition of sectors/surfaces and fittings is established. 1.3.Appropriate cosmetic maintenance/repair requirements and methods are established.
2. Clean and prepare vessel sectors and surfaces	2.1.Correct cleaning tools, equipment and materials are selected and used safely. 2.2.Fittings are cleaned and prepared for maintenance. 2.3.Surfaces and sectors are cleaned free of contaminants. 2.4.Safety practices are applied in accordance with organisational and legislative requirements.
3. Perform cosmetic maintenance/repair	3.1.Surfaces are correctly prepared, filled and faired ready for finishing. 3.2.Compatibility of re-coating materials is confirmed. 3.3.Material coatings are selected and applied correctly. 3.4.Fittings are maintained/replaced as appropriate. 3.5.Tools and equipment are cleaned and stored correctly.
4. Finish surfaces	4.1.Where applicable, surfaces are re-coated. 4.2.Where applicable, surfaces are sanded and buffed/polished to specification.

## Required Skills and Knowledge

<b>REQUIRED SKILLS AND KNOWLEDGE</b>
This section describes the skills and knowledge required for this unit.
<b>Required skills</b>
Look for evidence that confirms skills in: <ul style="list-style-type: none"> <li>• implementing written and verbal instruction and specification</li> <li>• recognising structure and components</li> <li>• identifying surface coating and toxicity status of different sectors</li> <li>• detecting faults, flaws and breakdowns in surface integrity</li> </ul>

**REQUIRED SKILLS AND KNOWLEDGE**

- preparing site to job, safety and environmental requirements
- selecting tools and equipment
- selecting cleaning/etching/cutting solutions and compounds, etc.
- using personal protective equipment (PPE)
- removing fittings, where required
- preparing parts/sections in need of repair
- acquiring, preparing and applying fillers, caulking compounds, sealants, adhesives, gel-coats, etc., where required
- preparing surfaces in readiness for application of surface finishing and protective coatings, where required
- applying/restoring surface finishes and or protective coatings
- reinstalling/replacing fittings
- disposing of waste, and general housekeeping

**Required knowledge**

Look for evidence that confirms knowledge of:

- structure, component, and surface type identification
- written and verbal instruction and specification
- range of cleaning/etching/cutting solutions and compounds, etc.
- protective and preservative coatings
- fault and blemish identification
- types of fillers, caulking, sealants, adhesives and their uses
- operation of hand and mechanical tools including high- pressure cleaning devices
- safety measures, safe working procedures and personal protection
- methods of cleaning, performing cosmetic repair and surface preparation, finishing and preservation
- environmental impact of run-off and waste
- waste disposal obligations and regulations

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

A person who demonstrates competency in this unit must be able to maintain marine vessel surfaces. Competency in this unit cannot be claimed until all prerequisites have been satisfied.

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

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.

#### Context of and specific resources for assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with maintaining marine vessel surfaces, or other units requiring the exercise of the skills and knowledge covered by this unit.

#### Method of assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

**EVIDENCE GUIDE**

<b>Guidance information for assessment</b>	
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**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. 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) may also be included.

**Cosmetic maintenance/repair**

Cosmetic environmental and other damage including chips in fibre reinforced plastics, minor corrosion in metal, caulking in timber surfaces, wear and corrosion of fittings

**Cleaning tools, equipment and materials**

Hand scrapers and scouring pads, handheld power tools, abrasive materials and equipment and associated dust extraction accessories, high-pressure blast cleaning equipment and chemical cleaners such as acid wash, solvent, detergent

**Unit Sector(s)**

<b>Unit sector</b>	
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**Co-requisite units**

<b>Co-requisite units</b>	



<b>Co-requisite units</b>		

## Competency field

<b>Competency field</b>	Marine craft construction
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