



Australian Government

MEM25005 Construct and assemble marine vessel timber components

Release: 2

MEM25005 Construct and assemble marine vessel timber components

Modification History

Release 2. Quantum of hours of workplace practice removed. Supersedes and is equivalent to MEM25005 Construct and assemble marine vessel timber components (Release 1).

Release 1. Supersedes and is equivalent to MEM25005B Construct and assemble marine vessel timber components.

Application

This unit of competency defines the skills and knowledge required to construct and assemble marine timber components, including laminating by cold processes, and applies to marine vessel backbone components.

Where hull is to be planked, planking can include carvel, strip, clinker and double diagonal systems.

Where permanent timber bending practices are required including boiling/steam bending then see unit MEM25009 Form timber shapes using hot processes.

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

Band: A

Unit Weight: 8

Pre-requisite Unit

MEM04018	Perform general woodworking machine operations
MEM09002	Interpret technical drawing
MEM11011	Undertake manual handling
MEM12007	Mark off/out structural fabrications and shapes
MEM12023	Perform engineering measurements
MEM12024	Perform computations
MEM13015	Work safely and effectively in manufacturing and engineering
MEM14006	Plan work activities
MEM16006	Organise and communicate information

MEM18001	Use hand tools
MEM18002	Use power tools/hand held operations

Competency Field

Marine craft construction

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
2	Construct marine vessel timber components	2.1	Select appropriate tools/equipment to suit job application
		2.2	Select template/measurement to suit component construction
		2.3	Ensure material is dressed, sized and shaped to suit job requirements and specifications
		2.4	Check final form/shape of component against template/measurement specification and modify, as necessary
		2.5	Apply component identification and set-up markings
3	Assemble components	3.1	Set up jig support assembly to suit job requirements
		3.2	Select materials for fastening, joining and sealing and use according to job specifications and requirements

Elements describe the essential outcomes.

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

- 3.3 Determine assembly and fastening sequence
- 3.4 Carry out material preservation requirements, as required
- 3.5 Assemble components to specified line markings and positions
- 3.6 Ensure assembled component meets specifications
- 3.7 Clean/prepare component assembly to suit job requirements

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

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.

Marine vessel backbone components include one (1) or more of the following:

- keel
- deadwoods
- stem
- transverse and longitudinal framing
- knees
- deck framing
- hull construction
- laid deck construction
- superstructures

Materials include one (1) or more of the following:

- hardwood
- softwood
- plywood sheeting
- a combination

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.

- Tools and equipment include one (1) or more of the following:**
- hand and hand held power tools
 - workshop equipment
 - bandsaw
 - surfacer
 - thicknesser
- Fastening methods include one (1) or more of the following:**
- marine-grade adhesives
 - sealant and caulking materials
 - metal fasteners (copper/silicon bronze/monel/stainless steel)

Unit Mapping Information

Release 2. Supersedes and is equivalent to MEM25005 Construct and assemble marine vessel timber components (Release 1).

Release 1. Supersedes and is equivalent to MEM25005B Construct and assemble marine vessel timber components.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>