



Australian Government

Assessment Requirements for PMBPROD247E Create composite laminates using hand lay-up techniques

Release: 1

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Modification History

Release 1. Unit code and title changed. Application changed. Elements and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMBPROD247 Hand lay up composites.

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:

- create composite laminates using hand lay-up techniques at least once to meet job specifications.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- principles of hand lay-up techniques in relation to the production of composites laminates
- types of composite laminates, including:
 - gel coats
 - resins
 - fibre reinforcements
- types of materials, tools and equipment to meet job specifications
- set-up procedures for, and indicators of, mould readiness for production
- methods of manual application of composite materials
- production workflow sequences and materials demand
- key variables that may affect product quality and production output, including:
 - the impact of resin-to-fibre ratios on product outputs
 - mould conditions
 - ambient temperature
 - air flow and ventilation rate
 - viscosity of resin
 - age of resin mix and pot-life of mix
- typical process and product problems, as listed below, including early warning signs, possible causes and corrective actions:
 - cracks, dents or imperfections in the mould
 - incorrect resin ratios
 - contamination of materials
 - shifting of fibres before the resin is laid

- stacking of fibre and resin sequence problems
- product problems including voids, poor surface finish, colour contamination and release from mould damage
- organisational procedures relevant to the work environment job or role
- hazards that may arise in the job or work environment, and:
 - their possible causes
 - potential consequences
 - appropriate risk controls.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies.

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=932aacef-7947-4c80-acc6-593719fe4090>