



Australian Government

Assessment Requirements for PMBTECH507E Develop fibre-composite products using cored-laminate techniques

Release: 1

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Modification History

Release 1. Unit code changed. Application changed. Elements and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMBTECH507 Develop fibre-composite products using cored-laminate techniques.

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:

- develop fibre-composite products using cored-laminate techniques, at least once, to meet job and product specifications, and addressing one or more of:
 - structural optimisation
 - strength problems
 - core shearing
 - bending.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- principal construction techniques and the technical and structural considerations of various types
- material properties and their suitability for use as core, including PVC (polyvinyl chloride) rigid foams, PU (polyurethane) foams, SAN (styrene acrylonitrile) foams, linear PVC foams, plywood, balsa and honeycomb materials
- layered or laminate structural behaviour
- hand lay-up and vacuum-bagging techniques
- equipment failure modes
- function and operating principles of composites forming equipment, machine components and ancillary equipment
- impact of temperature, pressure and time on product quality and production output
- impact of variations in raw materials and equipment operation in relation to final product
- factors that may affect product quality or production output and appropriate remedies
- types of technical and engineering drawings, and the methods used to produce them including computer-aided design (CAD) and freehand sketching
- organisation procedures relevant to the work environment or job 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>