



Australian Government

Assessment Requirements for PMBTECH403E Test thermoset composite laminates and materials

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 PMBTECH403 Test fibre-composites materials and laminates.

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:

- test thermoset composites laminates and materials at least once to meet design specifications and characteristics.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- types of tests, and their purposes and functions, including:
 - raw material applications (for example, resin viscosity, specific gravity of resins and gelcoats, gel time, resin exotherm, monomer content, heat deflection temperature, styrene emission, resin colour, and gelcoat water resistance)
 - laminate applications (for example, Barcol hardness, tensile strength and elongation, compressive strength, flexural strength and flexural modulus, impact strength, glass content, water absorption, product weathering capabilities, dielectric strength, flammability, acid and alkali resistance, and thickness testing)
 - test applications (for example, comparing use of common resins and reinforcements in laminates, comparing the tensile strength of given laminates with metals, and comparing test failure modes of laminate samples with metals)
- role of testing in quality control and quality assurance procedures.

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>

