

Title	Engineer a laminate to design criteria for composites		
Level	6	Credits	40

Purpose	People credited with this unit standard are able to engineer a laminate and determine prototype performance to design criteria, calculate mechanical properties required, and engineer the laminate.
----------------	--

Classification	Composites > Production Composites
-----------------------	------------------------------------

Available grade	Achieved
------------------------	----------

Guidance Information

- 1 Definition
Process specification refers to the documented instructions and method of applying the materials to manufacture the item which includes time, materials, temperature, and application rates.
- 2 All workplace policies and procedures must meet recognised codes of practice such as the Code of Practice for Health and Safety in the Manufacture of Composites Based on Synthetic Resins (Fibreglass), 1998 and any subsequent amendment. This code, and other relevant codes of practice, are available at <https://worksafe.govt.nz/>.

Outcomes and performance criteria

Outcome 1

Determine prototype laminate performance against design criteria.

Performance criteria

- 1.1 Test results meet specified design criteria.
- 1.2 Structural properties are determined according to design criteria.

Outcome 2

Calculate mechanical properties.

Performance criteria

- 2.1 Mechanical properties calculated match requirements of design criteria.

2.2 Mechanical properties calculated meet needs of production requirements.

Outcome 3

Engineer laminate.

Performance criteria

3.1 Laminate is engineered to meet mechanical properties calculated.

3.2 Laminate is engineered to requirements of design criteria.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	9 December 1994	31 December 2022
Revision	2	14 April 1997	31 December 2022
Revision	3	5 January 1999	31 December 2022
Review	4	26 September 2001	31 December 2022
Rollover and Revision	5	21 August 2009	31 December 2022
Rollover and Revision	6	26 July 2018	31 December 2022
Review	7	25 March 2021	31 December 2025
Rollover and Revision	8	25 August 2022	31 December 2025

Consent and Moderation Requirements (CMR) reference

0136

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.