



**Australian Government**

**Assessment Requirements for  
FWPCOT6210 Develop engineered wood  
products to meet energy efficient building  
design needs**

**Release: 1**

# Assessment Requirements for FWPCOT6210 Develop engineered wood products to meet energy efficient building design needs

## Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 4.0.

## Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has:

- developed two designs for one or more of the following types of engineered wood products, from initial concepts through to operational level, to meet the requirements of energy efficiency performance for residential buildings:
  - laminated beams
  - laminated veneer lumber
  - plywood
  - chipboard
  - hardboard
  - medium density fibreboard
  - oriented strand board
  - laminated or engineered flooring
  - glued laminated timber (glulam)
  - cross-laminated timber (CLT).

## Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and key content of the following codes and standards:
  - National Construction Code guidelines and standards for climate zones and energy efficiency measures
  - AS/NZ Standards associated with engineered wood products and associated design and construction
  - forest certification and Chain of Custody standards
- key components of market analysis, including:

- need
- placement
- financial certainty
- volume
- market issues relevant to engineered wood products and climate zones and applications
- theory underpinning development of R-values
- timber engineering design principles for energy efficient residential constructions
- characteristics of a range of timber species and associated wood-based products, their durability and serviceability
- key features of product development stages relevant to engineered wood products, including:
  - prototyping
  - testing
  - acquiring and commencing certification
  - gaining approval for infrastructure development
  - establishing production methods and procedures
- project management processes and tools for developing engineered wood products, including:
  - quality management systems
  - risk assessment systems
  - cost-benefit analysis tools
  - safe operating procedures for production processes
- purpose, format and common contents of business cases for realising designs, including:
  - capital cost
  - material
  - labour
  - design expenses
  - overheads
  - margin
  - running cost
  - lifecycle analysis
  - market uptake
  - discount and internal rate of return on investment
  - other opportunity cost analysis
- system functions and capabilities of house energy rating software and associated protocols for use.

## Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:

- skills must be demonstrated in an environment that accurately reflects workplace conditions
- resources, equipment and materials:
  - computers, keyboards, printers and software used to document business case, design specifications and safe operating procedures
- specifications:
  - documents and proformas commonly used for developing business cases and operating procedures for production processes.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## **Links**

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>