Title	Dry wood veneer for laminated veneer lumber and plywood manufacture		
Level	4	Credits	10

Purpose	People credited with this unit standard are able to: demonstrate knowledge of the fundamentals of wood veneer drying for laminated veneer lumber (LVL) and plywood manufacture and associated hazards; operate and maintain a wood veneer dryer for LVL and plywood manufacture; and monitor and control the performance of a wood veneer dryer for LVL and plywood manufacture and complete records.
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Classification	Solid Wood Manufacturing > Laminated Veneer Lumber and Plywood Manufacturing
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Available grade	Achieved
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#### **Guidance Information**

- 1 Legislation Health and Safety at Work Act 2015. Resource Management Act 1991.
- 2 Definitions

Accepted industry practice refers to approved codes of practice and standardised procedures accepted by the wider wood manufacturing industry as examples of best practice.

*Preventative maintenance* refers to the care and servicing of equipment and machinery. This may include periodic checks and inspections, testing, measurements, adjustments, or parts replacement as required in accordance with worksite policies and procedures for the purpose of preventing faults or failures and to maintain production requirements.

*Scarf* means to dock and scarf join veneers for LVL and plywood production. *Workplace procedures* refer documented policies and procedures set by the organisation carrying out the work, and to documented or other directions provided to staff, and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor's instructions, and procedures to comply with legislative and local body requirements relevant to the wood manufacturing sector. 3 Assessment information All activities and evidence must be in accordance with workplace procedures and accepted industry practice.

# Outcomes and performance criteria

## Outcome 1

Demonstrate knowledge of the fundamentals of wood veneer drying for LVL and plywood manufacture and associated hazards.

#### Performance criteria

- 1.1 The purpose of the veneer dryer is described.
- 1.2 The operating parameters and capability of veneer dryers are explained.
  - Range may include but is not limited to temperatures, throughput speeds, veneer moisture content, re-dry rate.
- 1.3 Operating components and process controls of veneer dryers are identified, and their purposes are explained.
  - Range may include but is not limited to transport system, heat transfer, temperature controls, venting system, moisture content readers, cool down section, distributed control system.
- 1.4 Hazards associated with the drying of wood veneer are identified, and the role of protective equipment and safety features is explained.
  - Range hazards may include but are not limited to toxic gases, steam, heat, confined space, flash points, explosions, moving machinery; safety features may include but are not limited to – personal protective equipment, hold cards, lockouts, stop buttons, guards, fire detection and prevention systems.
- 1.5 The consequences of non-conformance of veneer drying with workplace quality and safety standards are described in terms of equipment damage, production loss, and personal hazard.

## Outcome 2

Operate and maintain a wood veneer dryer for LVL and plywood manufacture.

## Performance criteria

2.1 The veneer dryer is set up, started, operated, and shut down.

- 2.2 Operating parameters are set and adjusted to achieve production requirements.
  - Range operating parameters may include but are not limited to temperature, throughput; production requirements may include but are not limited to – product quality, production rate, fuel economy.
- 2.3 Operating faults and malfunctions are identified, and corrective actions are taken.
  - Range may include but is not limited to temperature fluctuations, abnormal moisture content variations, discolouration.
- 2.4 Equipment faults and malfunctions are identified, and corrective actions are taken.
  - Range equipment faults and malfunctions may include but are not limited to electrical, mechanical, hydraulic, pneumatic, instrumentation.
- 2.5 Preventative maintenance and cleaning requirements are applied.

## Outcome 3

Monitor and control the performance of a wood veneer dryer for LVL and plywood manufacture and complete records.

## Performance criteria

- 3.1 Feedback information from controls and checks is monitored and interpreted, and control parameters are adjusted to maintain process requirements, plant performance, and product quality.
  - Range control parameters may include but are not limited to temperature, throughput, re-dry percentage.
- 3.2 Output product is checked.
  - Range may include but is not limited to moisture content, size, grading, stacking.
- 3.3 Production rate is managed.
- 3.4 Environmental requirements are managed.
  - Range may include but is not limited to emissions, water quality, dust, chemicals, fumes.
- 3.5 Production, maintenance, and quality records are completed.

Planned	review	date
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## Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 August 2006	31 December 2012
Review	2	25 January 2008	31 December 2013
Review	3	19 April 2012	N/A
Review	4	22 October 2020	N/A

Consent and Moderation Requirements (CMR) reference	0013	
This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.		

## Comments on this unit standard

Please contact Competenz <u>qualifications@competenz.org.nz</u> if you wish to suggest changes to the content of this unit standard.