



Australian Government

**Assessment Requirements for
FWPTMM3218 Develop knowledge of
vener preparation in plywood or laminated
vener lumber production**

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 8.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has researched veneer production in plywood or laminated veneer lumber (LVL) production and documented:

- two categories of veneer products
- legislation, standards and codes of practice relevant to veneer preparation in plywood or LVL production
- timber species and characteristics of peeler logs used in constructional veneer production
- two end applications of constructional veneer
- workflow in constructional veneer production
- one factor that may impact on quality and workflow in constructional veneer production
- stages involved in two of the following processes in constructional veneer preparation for plywood and LVL manufacture:
 - log preparation and conditioning processes
 - rotary peeling process
 - green veneer processing
 - veneer drying process
 - visual or automatic veneer grading processes
- one common problem and one relevant corrective action in one of the following processes in constructional veneer preparation for LVL or plywood manufacture:
 - log preparation and conditioning processes
 - rotary peeling process
 - green veneer processing
 - veneer drying process
 - visual or automatic veneer grading processes.

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:

- key requirements of legislation, standards and codes of practice relevant to veneer preparation in plywood or LVL production, including key requirements in Australian Standards relevant to constructional veneer preparation in LVL or plywood production
- categories of veneer products, including:
 - constructional – veneers for plywood and LVL production
 - decorative – veneers for aesthetic surface appeal
- characteristics of peeler logs from suitable timber species selected for use in veneer production, including:
 - age
 - growth rate
 - stem form
 - size
 - straightness
 - nature and quantity of defects
- criteria used to assign a value to peeler logs, including:
 - species
 - available volume
 - grade
- advantages of veneer-based products compared to solid wood products, including:
 - versatility and suitability for diverse applications
 - greater control over the wood property variability and gradients within the final product
 - ability to span wide supports
 - improved shear strength and impact resistance
- uses of rotary peeled veneers, including:
 - plywood panels
 - LVL
 - multilaminar wood
 - veneer based mass panels
- veneer production process, including:
 - log debarking and bucking
 - conditioning
 - peeling
 - clipping
 - drying
 - joint or veneer repair
 - crossbands

- grading – plywood grading and LVL grading
- quality checks conducted during veneer production
- factors impacting on quality and workflow in veneer production, including:
 - availability of suitable timber species and quality
 - veneer quality
 - operational, supervisory and management skills
 - access to and maintenance of plant and equipment
- types, features, operating principles and safety requirements for lathes used in rotary peeling, including:
 - spindled
 - hybrid
 - spindleless
- causes and remedies for common problems in rotary spinning process, including:
 - thermal distortion of the knife
 - knife condition and set-up
 - spin-out
 - barrelling
 - cotton reeling
 - mixing wet and dry veneer
 - mis-tracking
- veneer peeling defects
- effects of wood properties on veneer quality
- characteristics of green veneer, including:
 - not dried
 - high moisture content
- green veneer processing, including:
 - scarfing
 - composing
 - welding
 - jointing
- common problems in the scarfing process, and appropriate corrective actions
- common composer quality problems and appropriate corrective actions
- purpose of veneer drying
- stages in veneer drying
- moisture gradients and their impacts on veneer quality
- common defects resulting from veneer drying, and methods to reduce or eliminate these defects
- common operational problems in veneer drying, and appropriate corrective actions
- safety and environmental hazards associated with veneer production
- reasons for grading veneer sheets
- grading criteria and grade classes for veneer in Australian Standards

- uses and features of visual grading and automatic grading
- common defects affecting veneer grade, including:
 - sound knot
 - loose knot
 - pin knot
 - hole
 - split
 - gum pocket
 - gum vein
 - insect attack
 - discoloration
 - grain tear out
 - knife mark
 - fungal decay
 - waviness
 - rough
 - scratch
 - joint
 - bark pocket
- operating principles of automatic veneer strength, moisture and appearance grading systems.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- resources, equipment and materials:
 - reference materials on constructional veneer preparation in LVL or plywood production
 - internet access and computer software and hardware for accessing technical information on constructional veneer preparation in LVL or plywood production
- specifications:
 - Australian Standards relevant to constructional veneer preparation in LVL or plywood production.

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>