



**Australian Government**

# **Assessment Requirements for FWPSAW3257 Operate timber drying kiln**

**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 conducted one softwood or hardwood timber drying operation using one of the following timber drying kilns:

- batch drying kiln
- continuous drying kiln
- solar assisted kiln.

In performing this task, the individual has:

- followed workplace procedures to safely and efficiently dry timber
- complied with legislation, standards and codes of practice relevant to kiln operations
- dried timber to appropriate moisture contents and stress levels
- operated and monitored a kiln, and made necessary adjustments in the course of the drying process
- measured the amount of moisture content of timber or timber products during and after kiln drying
- kept degrade to a minimum when drying timber
- managed the safe movement of timber throughout all stages of the drying process
- produced accurate reports and records of the drying process.

## 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:

- workplace health and safety procedures relevant to timber drying operations, including personal protective equipment, emergency procedures and kiln operation
- legislation, standards and codes of practice relevant to kiln operations

- hazards and associated risks with timber drying, and risk control strategies as identified through risk assessments, manufacturer technical information, regulations and industry health and safety guides
- components, equipment, controls, energy systems and sources and operating principles of timber drying kilns from workplace environment
- methods for pre-start inspection and maintenance of timber drying kiln components
- methods for assessing consistent drying characteristics of racks, including:
  - size
  - age
  - condition
  - species
- reasons for drying timber
- timber drying stages
- wood-water relationships in the drying process
- timber moisture content, including fibre saturation point and equilibrium moisture content
- methods for monitoring and measuring characteristics of kiln charge during and after kiln drying, including:
  - moisture content
  - drying degrade
  - moisture gradient and stress
- influence of temperature, relative humidity and rate of air circulation on the drying rate
- kiln drying schedules for optimal drying rate, turnaround time and target moisture content without causing timber degrade
- timber drying defects, including surface checks, internal checks, end splits, collapse, excessive distortion, bow, spring, twist, cup and case hardening, reasons and control measures
- workplace procedures for drying timber, including:
  - quality assurance processes
  - storage systems and labelling
  - communication and reporting on drying process outcomes.

## Assessment Conditions

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

- physical conditions:
  - skills must be demonstrated in a timber processing plant, a timber product manufacturing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - timber drying kiln
  - timber for drying

- personal protective equipment required for timber drying operations
- specifications:
  - templates for reporting on timber drying outcomes
  - timber drying schedule
  - workplace procedures for timber drying
  - workplace health and safety procedures applicable to timber drying.

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>