



**Australian Government**

# **FWPCOT2235 Assess timber for manufacturing potential**

**Release: 1**

# FWPCOT2235 Assess timber for manufacturing potential

## Modification History

| Release | Comment                                                                                                                                                                                                                                                 |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | Replaces equivalent unit FPICOT2235A Assess timber for manufacturing potential, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2.<br><br>This is the first release of this unit in the new standards format. |

## Application

This unit of competency describes the outcomes required to assess timber for its manufacturing potential for frame and truss construction. Timber is assessed for ability to hold nail plates and retain engineered strength ratings with particular attention given to serviceability.

Work is completed in a factory environment, usually as part of production of prefabricated trusses, frames and floors.

No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication.

## Pre-requisite Unit

Nil

## Unit Sector

Sawmilling and Processing

Timber Manufactured Products

Wood Panel Products

## Elements and Performance Criteria

| ELEMENTS                                         | PERFORMANCE CRITERIA                                                                                                                                                                                   |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.</i> |
| 1. Prepare for assessing                         | 1.1 Review work order and where required check with appropriate personnel.                                                                                                                             |

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <p>1.2 Identify type and quantity of material to be assessed and obtain from storage location.</p> <p>1.3 Select appropriate equipment and check for operational effectiveness in line with manufacturer's recommendations.</p> <p>1.4 Plan visual assessment process in line with organisational procedures.</p>                                                                                                                                                                                                                                                   |
| 2. Assess timber       | <p>2.1 Identify requirements for storage and subsequent processing of materials.</p> <p>2.2 Assess characteristics and defects of material against industry and Australian Standards to determine plating potential.</p> <p>2.3 Identify defects prior to plating or sawing.</p> <p>2.4 Orientate timber components to make best use of characteristics.</p> <p>2.5 Select timber assessed as unsuitable for plating for reprocessing to minimise wastage.</p> <p>2.6 Record assessment outcomes and distribution problems and report to appropriate personnel.</p> |
| 3. Distribute material | <p>3.1 Reject sub-standard materials; dispose of or recycle in line with environmental protection practices.</p> <p>3.2 Organise movement of material to storage or processing operations in line with organisational procedures.</p> <p>3.3 Monitor on-site movement of material to ensure intended flow is achieved.</p> <p>3.4 Label material in line organisational procedures.</p>                                                                                                                                                                             |

## Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

|                               |                                                                                                                                                                                                                                                                                                                                |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Numeracy skills to:           | <ul style="list-style-type: none"> <li>identify quantities of assessable material within work orders and count raw materials</li> <li>measure size of undesirable timber characteristics</li> <li>complete routine assessment records involving numerical grades, dimensions and quantities tallied against orders.</li> </ul> |
| Oral communication skills to: | <ul style="list-style-type: none"> <li>ask questions and actively listen to clarify contents of work orders.</li> </ul>                                                                                                                                                                                                        |
| Reading skills to:            | <ul style="list-style-type: none"> <li>interpret:             <ul style="list-style-type: none"> <li>organisational procedures</li> </ul> </li> </ul>                                                                                                                                                                          |

|                                    |                                                                                                                                                                                                                             |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                    | <ul style="list-style-type: none"><li>• work orders.</li></ul>                                                                                                                                                              |
| Writing skills to:                 | <ul style="list-style-type: none"><li>• produce basic clear labels for timber identification</li><li>• complete accurate basic reports on assessment outcomes.</li></ul>                                                    |
| Planning and organising skills to: | <ul style="list-style-type: none"><li>• sequence the stages of assessment using work order to guide activities</li><li>• coordinate efficient on-site movement of assessed timber to maximise production outputs.</li></ul> |
| Problem-solving skills to:         | <ul style="list-style-type: none"><li>• recognise undesirable timber characteristics and assess as unfit for plating purpose</li><li>• identify and dispose of defective materials.</li></ul>                               |

## Range of Conditions

Not Applicable

## Unit Mapping Information

FPICOT2235A Assess timber for manufacturing potential

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

# Assessment Requirements for FWPCOT2235 Assess timber for manufacturing potential

## Modification History

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|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | <p>Replaces equivalent unit FPICOT2235A Assess timber for manufacturing potential, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards format.</p> <p>Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including 'Required Skills and Knowledge, Evidence Guide and Range Statement</p> |

## Performance Evidence

- A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit. If a specific volume or frequency is not stated below, then evidence must be provided that the following requirements have been performed on at least one occasion:
- assess the following range of timber for its manufacturing potential for frame and truss construction:
  - native timber species
  - imported timber species
  - dressed timber
  - in-the-rough timber
  - stress and non-stress graded timber
  - preservative treated timber
- use the following equipment during assessments:
  - charts
  - gauges
  - picture cards
  - measuring equipment
- complete an assessment report for each timber assessment identifying timber characteristics and defects and how these would impact on nail plate holding ability.

## Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- basic aspects of guidelines and standards for provisions relevant to engineered strength ratings and timber ability to hold nail plates
- environmental protection practices for safely disposing of, recycling and reusing timber in a forest products factory setting
- range of timber characteristics and defects and how these affect nail plate holding ability including:
  - bow, spring and twist
  - wane/want and collapse
  - cupping and other distortion
  - knots and knot holes
  - borer damage
  - gum/resin veins and pockets
  - decay
  - end splits, internal checks and surface checks
  - low density material
  - compression failures and fractures
  - durability
  - heart in material
  - joint strength
- range of industry standard timber species and materials and how these affect nail plate holding ability including:
  - native timber species
  - imported timber species
  - dressed timber
  - in-the-rough timber
  - stress and non-stress graded timber
  - preservative treated timber
  - laminated veneer coated and treated timber products
  - beams or laminated beams
- range of industry standard lengths, cross sections and grades and how these affect nail plate holding ability
- storage requirements for timber as it relates specifically to the organisation's operation
- processing requirements for timber as it relates specifically to the organisation's product range
- methods to orientate components to make best use of timber characteristics
- methods to label assessed timber and common terms used
- types of tools and equipment used for assessing timber; their purpose, features and use:
  - charts
  - gauges

- picture cards
- measuring equipment
- organisational procedures specific to assessing timber:
  - communication reporting lines
  - recording and reporting assessment outcomes.

## Assessment Conditions

The following resources must be made available:

- tools and equipment used for assessing timber:
  - charts
  - gauges
  - picture cards
  - measuring equipment
- a comprehensive commercial range of timber to be assessed with characteristics and defects
- personal and protective equipment for assessing timber for manufacturing potential
- work order for timber assessment activities
- template timber assessment reports
- organisational procedures for assessing timber.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessor requirements

Assessors must:

- hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.
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