



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **FPISAW2201B Grade round poles and debarked logs**

**Release: 1**

## **FPISAW2201B Grade round poles and debarked logs**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Unit descriptor**

This unit describes the outcomes required to visually evaluate pole and log characteristics and defects for classification into varying strength and appearance grades. It includes sorting poles and logs into classifications, marking material in line with grade and on-site distribution.

General workplace legislative and regulatory requirements apply to this unit; however there are no specific licensing or certification requirements at the time of publication

This unit replaces FPIS2001A Grade round poles and debarked logs

### **Application of the Unit**

#### **Application of the unit**

The unit involves grading round poles and debarked logs in a forest products factory setting

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

### **Licensing/Regulatory Information**

Refer to Unit Descriptor

### **Pre-Requisites**

#### **Prerequisite units**

## Prerequisite units

## Employability Skills Information

**Employability skills**      This unit contains employability skills

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for grading, sorting and marking	<p>1.1. Applicable <i>Occupational Health and Safety</i> (OHS), <i>environmental</i>, <i>legislative</i> and <i>organisational requirements</i> relevant to grading round <b>poles and debarked logs</b> are identified and followed</p> <p>1.2. <i>Work order</i> is reviewed and checked with <i>appropriate personnel</i></p> <p>1.3. Type and quantity of poles and debarked logs to be graded, sorted and marked is acquired from the <i>storage location</i></p> <p>1.4. <i>Equipment</i> is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer's recommendations</p> <p>1.5. Grading, sorting and marking process is planned in line with site procedures</p> <p>1.6. <i>Communication</i> with others is established and maintained in line with OHS requirements</p>
2. Grade, sort and mark poles and debarked logs	<p>2.1. Pole and debarked log requirements for storage or subsequent processing operations are selected</p> <p>2.2. <i>Size</i> of poles or logs is visually assessed in line with industry standards and number of <i>ranges</i> estimated</p> <p>2.3. Material characteristics and <i>defects</i> of each pole or log are evaluated against industry standards for grade type</p> <p>2.4. <i>Moisture content</i> is measured, recorded and reported</p> <p>2.5. Defects are clearly marked for docking in line with site requirements</p> <p>2.6. Material is marked and sorted, in line with its grade classification, with markers or stickers which are clearly interpretable</p> <p>2.7. Grading outcomes and distribution problems are <i>recorded and reported</i> in line with workplace procedures</p>
3. Distribute material	<p>3.1. Poles or logs are directed and moved to planned storage or processing operations in line with site requirements</p> <p>3.2. Sub-standard material is rejected and <i>disposed of</i> in line with site procedures and environmental requirements</p> <p>3.3. <i>On-site movement of material</i> is monitored to ensure intended flow is achieved</p>

**ELEMENT****PERFORMANCE CRITERIA**

3.4.Storage locations are labelled in line with site systems

**Required Skills and Knowledge****REQUIRED SKILLS AND KNOWLEDGE**

This describes the essential skills and knowledge and their level required for this unit

**Required skills**

- Technical skills sufficient to use and maintain relevant tools, machinery and equipment; and to efficiently and safely grade, sort and mark poles and debarked logs
- Communication skills and interpersonal techniques sufficient to interact appropriately with colleagues and others in the workplace
- Literacy skills sufficient to accurately locate, record and report information
- Numeracy skills sufficient to estimate, measure and calculate time required to complete a task
- Problem solving skills sufficient to review and accurately identify work requirements; identify problems and equipment faults and demonstrate appropriate response procedures

**Required knowledge**

- Applicable Commonwealth, State or Territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for grading round poles and debarked logs
- Environmental protection requirements, including the safe disposal of waste material, minimising carbon emissions and the cleaning of plant, tools and equipment
- Organisational and site standards, requirements, policies and procedures for grading round poles and debarked logs
- Environmental risks and hazards
- Methods of visual estimation, grading, colour identification and tagging
- Sorting, marking and distribution processes
- Industry standard diameters and lengths
- Storage systems and labelling
- Established communication channels and protocols
- Problem identification and resolution strategies and common fault finding techniques
- Types of tools and equipment and procedures for their use, operation and maintenance

**REQUIRED SKILLS AND KNOWLEDGE**

- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace information

# Evidence Guide

## EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

### Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can safely grade, sort and mark poles or debarked logs in line with organisational requirements

### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to, and satisfy, all of the requirements of the elements of this unit and include demonstration of:

- following applicable Commonwealth, State or Territory legislative and regulatory requirements and codes of practice relevant to grading round poles and debarked logs
- following organisational policies and procedures relevant to grading round poles and debarked logs
- grading, sorting and marking a full range of poles or debarked logs in readiness for storage and/or processing
- distributing poles or debarked logs on site using designated equipment

### Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to follow relevant regulatory or Australian Standards requirements
- The following resources should be made available:
  - workplace location or simulated workplace
  - materials and equipment relevant to undertaking work applicable to this unit
  - specifications and work instructions

### Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and

## EVIDENCE GUIDE

accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge

- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. **Italicised** wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

**OHS** requirements: are to be in line with applicable Commonwealth, State or Territory legislation and regulations, and



## RANGE STATEMENT

organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices including required actions relating to forest fire
- manual handling including shifting, lifting and carrying
- machine isolation and guarding
- legislation
- organisational policies and procedures
- workplace practices

**Environmental requirements** may include:

**Legislative requirements:**

are to be in line with applicable Commonwealth, State or Territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

**Organisational requirements** may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance
- procedural manuals
- quality and continuous improvement processes and standards

## RANGE STATEMENT

- OHS, emergency and evacuation procedures
- ethical standards
- recording and reporting requirements
- equipment use and maintenance and storage requirements
- environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)

**Poles and debarked logs** may include:

- hardwood or softwood
- poles left in the round
- with or without preservative treatment
- logs destined for conversion to boards

**Work order** is to include:

- instructions for receipt/despatch and grading
- sorting and marking of poles or debarked logs to/from the designated storage location or processing

and may include:

- type
- size
- quantity

and may also include:

- instructions for the environmental monitoring of work and procedures
- environmental care requirements relevant to the work

**Appropriate personnel** may include:

- supervisors
- suppliers
- clients
- colleagues
- managers

**Storage locations** may include:

- storage racks
- storage bays
- bins
- stacks
- pallet boxes
- modularised storage components
- temporary stacking bays (stand, frame or ground)

and may be divided into:

## RANGE STATEMENT

- standard product classification
  - product designation
  - size
  - dimension
  - stack number
  - weight
  - grade
  - shelf life
  - stock rotation position
- Equipment** may include:
- measuring equipment
  - moisture meters
  - lifting equipment for the movement of poles or logs
- Communication** may include:
- verbal and non-verbal language
  - constructive feedback
  - active listening
  - questioning to clarify and confirm understanding
  - use of positive, confident and cooperative language
  - use of language and concepts appropriate to individual social and cultural differences
  - control of tone of voice
  - body language
- Size** is to include:
- largest through to smallest diameters of poles and debarked timber within industry or site standards
  - longest through to shortest lengths of poles and debarked logs within industry or site standards
- Range** is the number of classifications/grades poles or logs are sorted into based on diameter or length
- Defects** may include:
- warp
  - wane
  - curvature
  - shakes
  - insect defects
  - knots
  - resin pockets
- Moisture content**
- is the amount of moisture maintained in poles or debarked logs after kiln drying to avoid

## RANGE STATEMENT

- cracking and deforming
- in Australia generally ranges between 10% in warmer, more humid climates to 14% in cooler climates
- Records and reports** may include:
- product type
  - size
  - inspection
  - grading and labelling outcomes
  - storage locations
  - quality outcomes
  - hazards
  - incidents
  - equipment malfunctions
- and may be:
- manual
  - using a computer-based system or other appropriate organisational communication system
- Disposing of** may include:
- recycling sub-standard material
  - re-using sub-standard material
- On-site movement of material** may include:
- the use of:
- conveyor belt systems
  - track systems
  - lifting equipment
- lifting equipment such as:
- fork lifts
  - slings
  - lifting/moving frames
  - trolley jacks
  - gantry cranes
  - dozers
  - loaders
- assistance with lifting such as:
- the involvement of two or more personnel to lift materials manually or to guide the movement of mechanical equipment

## **Unit Sector(s)**

**Unit sector**                      No sector assigned

## **Co-requisite units**

**Co-requisite units**

## **Competency field**

**Competency field**              Sawmilling and Processing