



Australian Government

Department of Education, Employment and Workplace Relations

FPICOT3223B Grade and mark logs

Release: 1

FPICOT3223B Grade and mark logs

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit describes the outcomes required to evaluate, grade and mark logs for segregation to achieve best end use

Compliance with licensing, legislative, regulatory or certification requirements may be required in various jurisdictions

This unit replaces FPICOT3223A Grade and mark logs

Application of the Unit

Application of the unit The unit involves grading and marking logs in a range of work environment settings

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

Not Applicable

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 to evaluate logs	1.1. Applicable occupational health and safety (OHS), environmental, legislative and organisational requirements relevant to grading and marking logs are identified and followed 1.2. Site environmental protection measures are adhered to in line with relevant legislation and regulations 1.3. Work order is reviewed and clarified with appropriate personnel 1.4. Standards, specifications and lengths of timber products are identified and assessed for potential usage purposes 1.5. Log and wood characteristics are checked and logs to be graded and recovered are identified 1.6. Log grading and marking operations are checked for safe working conditions and planned in line with site procedures 1.7. Communication with others is established and maintained in line with OHS requirements
2. Evaluate and mark logs	2.1. Grading and marking operations are conducted in line with work order, and environmental and OHS requirements 2.2. Log species is identified and assessed for suitability against standard industry specifications 2.3. Defects are identified and assessed for suitability against product specifications 2.4. Log is evaluated, graded and directed to best end use in line with specifications and site segregation code 2.5. Log is clearly and accurately marked for grading or cutting in line with site segregation code 2.6. Logs that cannot be safely processed by own personal skill are marked and reported in line with site procedures
3. Complete grading and marking of logs	3.1. Logs are measured and data recorded clearly and accurately in line with industry standards 3.2. Feedback on grading outcomes is received from appropriate personnel and queries are resolved using suitable interpersonal skills 3.3. Grading and marking results are recorded and reported in line with site procedures

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 select, use and maintain appropriate tools and equipment; efficiently and safely grade and mark logs for segregation; grade and segregate logs on the basis of species, size and characteristics across the full range required; identify and calculate log defects; optimise recovery to grade
- Communication skills sufficient to use appropriate communication and interpersonal techniques with colleagues and others
- Literacy skills sufficient to record and report workplace information; maintain documentation
- Numeracy skills sufficient to select appropriate mathematical processes to accurately measure logs
- Problem solving skills sufficient to identify problems; 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 and marking logs
- Environmental protection requirements, including the safe disposal of waste material
- Organisational and site standards, requirements, policies and procedures for grading and marking logs
- Environmental risks and hazards
- Criteria for recycling and re-using timber with defects
- Using material effectively and efficiently
- Appropriate mathematical procedures for estimation and measurement
- Industry standards for log species, size and characteristics across the full range, and defects and length dimensions
- Procedures to grade and mark logs for segregation, including segregation codes
- Established communication channels and protocols
- Problem identification and resolution strategies, and common fault finding techniques
- Types of tools and equipment, and procedures for their safe use and maintenance
- 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 and efficiently evaluate, grade and mark logs for segregation 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 and marking logs
- following organisational policies and procedures relevant to grading and marking logs
- safely and efficiently evaluating, grading and marking logs for segregation
- estimating and measuring logs and log defects
- identifying requirements for log usage and grade, and determining log grade or potential grade

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. Bold 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
- 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
- OHS, emergency and evacuation procedures

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- ethical standards
 - recording and reporting requirements
 - equipment use, maintenance and storage requirements
 - environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)
- Grading and marking** may include:
- specific grading requirements
 - circumference
 - weight
 - diameter and volume of logs
 - cutting and de-peeling logs
- Environmental protection measures** may include:
- ground growth
 - canopy
 - general forest lean
 - wind speed and direction
 - fallen trees
 - density of trees
 - ground slope
 - soil and water protection
 - ground hazards
 - obstacles
- Work order** is to include:
- details of logs to be:
 - evaluated
 - graded
 - marked
- and may include:
- instructions for the environmental monitoring of work and procedures
 - environmental care requirements relevant to the work
- Appropriate personnel** is limited to:
- log graders
- and may include:
- supervisors
 - clients
 - colleagues
 - managers
- Timber products** may include:
- logs
 - debarked logs

RANGE STATEMENT

- poles
- piles
- girders
- veneer
- graded sawlog
- fencing products
- non-graded sawlog
- pulp

Characteristics may include:

- species
- pipe
- open pipe
- discontinuous and irregular shaped pipes
- loose gum veins
- gum pockets and rings
- termites and grubs
- hearts out of centre
- brown stain
- rot
- punk
- cork or pith
- black borer
- black heart
- straight shakes
- shakes in spiral grain
- overgrowth and doze pockets
- small log pipe allowance
- length
- non-allowable length defects

Safe working conditions will include:

- control of potential and existing risks and hazards
- ensuring log stability during evaluation, grading and marking processes

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

RANGE STATEMENT

Assessment:

- control of tone of voice
- is for the purpose of determining the best end use for logs
- of defects may include determining allowable length defects involving limbs, multiple length defects, burn scars, bumps, swellings, kinks and bends, straight splits, spiral grain, and associated splits
- of defects in sawlogs may include pipe and determining calculation using aids, including formulas, data tables, and hand-held programmable computers

Cutting may include:

- cross cutting to clarify grading decisions

Measurement may include:

- using callipers
- using a measuring tool

Records and reports may be:

- manual
- a computer-based system
- other appropriate organisational communication system

Unit Sector(s)

Not Applicable

Competency field

Competency field

Common Technical