



Australian Government

Department of Education, Employment and Workplace Relations

FPICOT2232B Cut material to shape using a saw

Release: 1

FPICOT2232B Cut material to shape using a saw

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to prepare and cut material to shape using sawing equipment in order to produce shaped timber products. This unit includes equipment maintenance

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 FPICOT2232A Cut material to shape using a saw

Application of the Unit

Application of the unit

The unit involves cutting material to shape using a saw 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

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 for shaping | 1.1. Applicable occupational health and safety (OHS), environmental , legislative and organisational requirements relevant to cutting material to shape using a saw are identified and followed
1.2. Work order is reviewed and clarified with appropriate personnel
1.3. Type and quantity of material to be shaped is selected from the storage location
1.4. Equipment is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer recommendations
1.5. Profile to be cut is identified and cutting blades are selected
1.6. Communication with others is established and maintained in line with OHS requirements |
| 2. Set up shaping equipment | 2.1. Pre-startup checks are carried out on equipment in line with site requirements
2.2. Machine guides are selected and attached to the machinery
2.3. Saw blade in the selected machinery is checked to be sharp and correctly aligned
2.4. Cut is set in line with the required shape and minimisation of waste
2.5. Off-cuts are disposed of in line with site procedures and environmental requirements
2.6. Material stack is positioned in close proximity to maximise ease of machine feeding
2.7. Equipment setup is checked and adjusted by running a piece of timber through the machine to check alignment |
| 3. Cut material to shape | 3.1. Material is fed into the machine at the feed rate prescribed by manufacturer's recommendations
3.2. Cutting sequence is followed, maintained and adjusted to produce the required shape and quantity of shaped products
3.3. Jig or shape line is regularly checked and adjusted to maintain the desired cut
3.4. Material with features is rejected and disposed of in line with site procedures and environmental |

ELEMENT**PERFORMANCE CRITERIA**

	requirements
	3.5. Processing and equipment faults are reported to appropriate personnel
	3.6. Material is safely stacked in designated location in line with work order
	3.7. Records and reports are accurately completed, processed and maintained in line with workplace procedures
4. Conduct operator maintenance	4.1. Equipment lock-out procedures are followed in line with OHS legislation and site procedures
	4.2. Saw blade is checked for blunt or damaged condition in line with site procedures
	4.3. Saw blade is removed, replaced and dealt with in line with site procedures, manufacturer recommendations and environmental requirements
	4.4. Machine area is kept clear of dust and debris in line with OHS and environmental requirements

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; efficiently and safely cut material to shape
- Communication skills sufficient to follow legislation, regulations, standards, codes of practice and established safe practices and procedures for cutting material to shape; use appropriate communication and interpersonal techniques with colleagues and others; locate, record and report information
- Literacy skills sufficient to follow legislation, regulations, standards, codes of practice and established safe practices and procedures for cutting material to shape using a saw
- Numeracy skills sufficient to measure, estimate and calculate time required to complete a task
- Problem solving skills sufficient to review and identify work requirements; identify problems and equipment faults; demonstrate appropriate response procedures

Required knowledge

- Applicable commonwealth, state or territory legislation, regulations, standards,

REQUIRED SKILLS AND KNOWLEDGE

codes of practice and established safe practices relevant to the full range of processes for cutting material to shape using a saw

- Environmental protection requirements, including the safe disposal of waste material (including preservative treated timber), and the minimisation of carbon emissions
- Organisational and site standards, requirements, policies and procedures for cutting material to shape using a saw
- Environmental risks and hazards
- Criteria for recycling and re-using off-cuts or material with features
- Characteristics of timber and timber features
- Shapes, feed rates and finish
- Methods for assessing condition of saw blades
- Storage systems and labelling procedures
- 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, operation 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 cut material to shape using a saw 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 cutting material to shape using a saw
- following organisational policies and procedures relevant to cutting material to shape using a saw
- cutting material to shape in line with the work order and prescribed organisational specifications
- conducting operator maintenance on a bandsaw
- stacking batches of cut material in line with organisational requirements and OHS regulations
- 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
- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and

Context of and specific resources for assessment

Method of assessment

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

RANGE STATEMENT

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

Shapes may include:

curved shapes for:

- construction
- furniture components

Work order is to include:

- instructions for the cutting and despatch of timber and timber products from the work site

and may include:

- type
- size
- length
- profile
- thickness
- quantity
- grade
- 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

Material may include:

- native timber species
- imported timber species
- dressed timber
- in-the-rough timber
- stress and non-stress graded timber
- preservative treated timber
- medium density fibreboard
- laminated veneer
- chipboard
- fibreboard and other manufactured board products

RANGE STATEMENT

- Storage locations** may include:
- coated and/or treated timber products
 - beams, including laminated beams
 - storage racks
 - storage bays
 - bins
 - stacks
 - pallet boxes
 - modularised storage components
 - temporary stacking bays (stand, frame or ground)

and may be divided into:

- standard product classification
 - product designation
 - size
 - dimension
 - stack number
 - weight
 - grade
 - shelf life
 - stock rotation position
- Equipment** is to include:
- procedures for machine lock-out, such as protecting operators and co-workers from accidental injury by isolating the machine from the power source

and may include:

- measuring equipment
 - band saws
 - jig saws
 - other shaping equipment
- 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

RANGE STATEMENT

Pre-startup checks

are conducted to ensure:

- machine has been set up correctly
- blade is installed accurately
- machine is operating to optimum performance

Machine guides may include:

- machine manufacturer produced guides located strategically on the machine to maintain timber in straight feed and ensure consistency of shape cut
- enterprise produced guides/jigs to maintain consistency of timber against the saw blade

Disposing of may include:

- recycling off-cuts or material with features
- re-using off-cuts or material with features
- redirecting off-cuts or material with features for energy recovery

Feed rate

is the rate of speed the material is passed through the machine affecting the sharpness of the saw blade, the finish of the material, and the production output

Features may include:

- warp
- wane
- cupping
- shakes
- insect defects
- knots
- resin pockets

Stacking may include:

- preparing for transport
- categorising in common size, length and angle
- marking lots in line with work order and site requirements
- locating so as not to block access or passage

Records and reports may include:

- product type and size
- profile
- inspection information
- grading and labelling outcomes
- storage locations
- quality outcomes
- hazards
- incidents
- equipment malfunctions

RANGE STATEMENT

and may be:

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

Dealing with may include:

- repairing or sending for repair blunt or damaged saw blades
- recycling blunt or damaged saw blades that cannot be repaired
- sending blunt or damaged saw blades that cannot be repaired to landfill

Unit Sector(s)

Not Applicable

Competency field

Competency field

Common Technical