



**Australian Government**

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

# **RTF3031A Undertake complex tree climbing**

**Release: 1**

## **RTF3031A Undertake complex tree climbing**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This competency standard covers tree climbing and rigging associated with tree operations such as tree pruning and tree removal in complex circumstances.

Complex tree climbing and rigging is likely to be undertaken with limited supervision, with general guidance on progress sought by others. Complex tree climbing and rigging requires a broad range of Level 2 skills, but requires the application of specialised in the use of ropes, climbing tools and equipment.

### **Application of the Unit**

Not applicable.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

Not applicable.

### **Elements and Performance Criteria Pre-Content**

Not applicable.

# Elements and Performance Criteria

## Elements and Performance Criteria

Element	Performance Criteria
1 Prepare for climb and tree operations	<p>1.1 Team members are informed of their role and duties in the climbing and tree operations according to <b>work procedures</b>.</p> <p>1.2 Ropes are selected according to <b>industry specifications</b> and required tree works.</p> <p>1.3 Ropes are assessed prior to use with damaged and faulty ropes discarded according to enterprise policy.</p> <p>1.4 Appropriate climbing <b>tools and equipment</b> are selected according to enterprise standards and manufacturers guidelines.</p> <p>1.5 Ropes, tools and equipment are checked, handled, maintained and stored according to safe work practices, manufacturers specifications and <b>enterprise OHS policies</b>.</p>
2 Access and descend from trees in <b>complex situations</b>	<p>2.1 Hazards that place climbers, ground support workers, the general public and property at risk are identified and appropriate actions taken to minimise that risk.</p> <p>2.2 <b>Personal protective and safety equipment</b> is used and adjusted according to manufacturers guidelines and enterprise OHS policies.</p> <p>2.3 Trees are accessed using appropriate <b>techniques</b> and equipment according to enterprise policy, procedures and safe work practices.</p> <p>2.4 Safe anchor points are selected according to strength and suitability requirements.</p> <p>2.5 Tree is descended in a controlled manner according to enterprise procedures.</p>
3 Undertake tree operations in complex situations	<p>3.1 Required tree operations are carried out according to treatment plans and work procedures.</p> <p>3.2 Load is lowered in a controlled manner using appropriate crane points according to safe work</p>

practices, branch weight and rope characteristics.

- 3.3 Staff are communicated with during operations, as required, verbally and by hand signals.
- 3.4 Tools and equipment are cleaned and stored according to manufacturers instructions and enterprise policy.

## **Required Skills and Knowledge**

Not applicable.

## Evidence Guide

### What evidence is required to demonstrate competence for this standard as a whole?

Competence in undertaking complex tree climbing requires evidence that a person can select the appropriate equipment for climbing, and access and descend trees in complex situations whilst undertaking tree operations such as pruning or removal.

The skills and knowledge required to undertake complex tree climbing must be transferable to a different work environment. For example, this could include different tree species, locations, and climbing approaches and techniques.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts, and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

standard tree climbing practices and principles including the use of PPE and secondary attachments

types, uses and safe working limit of ropes and all other equipment

first aid and rescue procedures applicable to tree work

industry codes of practice

a broad range of tree treatments and the most appropriate method of application specific to the requirements of the tree.

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- climb trees and use ropes
- apply a range of tree treatments
- interpret climbing plans and specifications
- communicate written and verbal instructions to fellow team members
- calculate tree heights and safe working and lifting loads.

## What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can **communication of ideas and information (2)** be applied?

Information about specific tasks associated with the job such as climbing methods and procedures, safety concerns, or any hazards encountered should be communicated with other members of the work team.
2. How can **information be collected, analysed and organised (2)**?

Ideas and information about climbing strategy, methods and safety requirements should be discussed and analysed with the work team.
3. How are **activities planned and organised (2)**?

All tools, equipment, materials and personnel involved in the climbing operations should be selected and organised before climbing work begins.
4. How can **team work (2)** be applied?

Complex tree climbing involves working with other members of a team to safely complete tasks.
5. How can the use of **mathematical ideas and techniques (2)** be applied?

Mathematical techniques may be applied when calculating heights of trees and safe working loads.
6. How can **problem-solving skills (2)** be applied?

Problems relating to climbing techniques and methods, workplace safety including working above ground level, access of trees, tools and equipment, emergency situation procedures, inclement weather and interruption in climbing activities may require problem-solving.
7. How can the **use of technology (2)** be applied?

Technology such as arboriculture climbing equipment and machinery may be used to climb trees safely.

**Are there other competency standards that could be assessed with this one?**

This competency standard **could** be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about **assessing this competency standard for consistent performance and where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to the **Assessment Guidelines**. Further advice may also be sought from the relevant **sector booklet**.



## Range Statement

### Range of Variables

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available

What **work procedures** are appropriate for this standard?

These may include climbing plans and specifications, location and site plans, manufacturers guidelines, work schedules, treatment plans, emergency rescue procedures, enterprise standard operating procedures (SOP), and OHS procedures.

What **industry specifications** for ropes may be applicable to this standard?

Specifications may include type, dynamics, diameter, tensile strength, breaking strain, safe working load (SWL), and melting point.

What **tools and equipment** may be used in climbing operations?

These may include ropes, safety harnesses, ascending and descending devices, ladders, safety equipment (helmets, ear and eye protection, gloves, boots, etc.), pulleys and blocks, shackles and carabines.

What **enterprise OHS policies** may be relevant to this standard?

OHS policies may include safe operation and maintenance of machinery and equipment, safe systems for working at heights in trees, safe procedures for working outdoors, appropriate use of personal protective clothing and equipment, correct manual handling techniques, and procedures for calling emergency services.

In what **complex situations** may climbers be required to work?

These may include situations made hazardous by tree branches vulnerable to failure under a load, trees affected by decay, disease and/or pests, trees with embedded objects such as wire, nails or spikes, proximity of power lines, adjacent property, or intruding branches. The trees height, size, trunk characteristics, shape and weight distribution of the crown may contribute to making conditions hazardous to a climber or a felling or trimming operation. Inclement weather may also contribute to making working conditions difficult and hazardous.

What **personal protective (PPE) and safety equipment** may be used to when climbing

Equipment may include boots, overalls, gloves, hard hats/helmets, ear and eye

trees?

protection, safety harnesses, ropes, sun hats and sunscreen lotion.

What **techniques** are used to access trees in complex situations?

Techniques may include setting false anchor points, footlocking and using climbing spikes.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

## **Unit Sector(s)**

Not applicable.