



Australian Government

Department of Education, Employment and Workplace Relations

AHCARB307A Undertake complex tree climbing

Release: 1

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Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers tree climbing and rigging associated with tree operations such as tree pruning and tree removal in complex situations and defines the standard required to: carry out and record pre-operational and safety checks; conduct a site and tree hazard identification and risk control assessment; inspect a tree and determine safest and best work method using risk controls established; select, inspect and prepare ropes, harnesses and other equipment associated with climbing trees; safely climb/ascend and descend large, hazardous and complex trees using a number of anchor points; climb using documented low risk work methods; inspect for faults and store ropes, harnesses and other climbing and safety equipment and replace if worn or faulty; practice an aerial rescue and document the hazards identified and the risk controls selected.
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Application of the Unit

Application of the unit	This unit applies to advanced techniques used to climb trees in arboriculture and applies to a climbing arborist.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for climbing and tree operations	1.1. Team members are informed of their role and duties in the climbing and tree operations. 1.2. Ropes are selected according to industry specifications and required tree works. 1.3. Ropes are assessed prior to use with damaged and faulty ropes discarded according to enterprise policy. 1.4. Appropriate climbing tools and equipment are selected. 1.5. Ropes, tools and equipment are checked. 1.6. Tree is inspected for safe ascension route.
2. Ascend and descend from trees	2.1. Occupational Health and Safety (OHS) hazards are identified risks assessed and appropriate controls are documented and implemented. 2.2. Personal protective and safety equipment is used and adjusted. 2.3. Trees are ascended using appropriate techniques and equipment. 2.4. Safe anchor points are selected according to strength and suitability requirements. 2.5. Tree is descended in a controlled manner according to industry practice.
3. Undertake tree operations	3.1. Required tree operations are carried out according to treatment plans, work procedures and rigging techniques. 3.2. Load is balanced, tensioned and lowered in a staged controlled manner using appropriate crane points according to safe work practices, branch weight and rope characteristics. 3.3. Staff are communicated with during operations, as required, verbally and by hand signals.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- climb trees and use twin ropes

REQUIRED SKILLS AND KNOWLEDGE

- select and inspect appropriate equipment
- select and tie a wide range of knots
- select low risk anchor points
- apply a range of tree treatments
- attach and use rigging equipment
- balance and tension a load
- operate chainsaws and pole-saws
- perform aerial rescue techniques
- use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required
- use numeracy skills to estimate, calculate and record routine workplace measures
- use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- identification of tree species and their pruning requirements
- tree pruning techniques appropriate to the pruning requirements of the species
- tree morphology, physiology and Compartmentalisation of Decay in Trees (CODIT) principles
- advanced tree climbing practices and principles including the use of Personal Protective Equipment (PPE) and secondary attachments
- types, uses and safe working limit of ropes and all other equipment
- impact of force under normal/failure conditions
- capability of lifting and lowering equipment
- Safe Working Loads (SWL) relationship between Breaking Strength (BS), Safety Factor (SF), Working Load Limit (WLL) and Cycles to Failure (CTF)
- awareness of power line clearances
- first aid and rescue procedures applicable to tree work
- industry codes of practice
- a broad range of trees and treatments
- advanced chainsaw techniques
- local government tree protection and preservation regulations
- AS4373-2007 Pruning of amenity trees
- relevant Code of Practice.

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	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following:</p> <ul style="list-style-type: none"> • carry out and record pre-operational and safety checks • conduct a site and tree hazard identification and risk control assessment • inspect a tree and determine safest and best work method using risk controls established • select, inspect and prepare ropes, harnesses and other equipment associated with climbing trees • safely climb, ascend and descend large, hazardous and complex trees using a number of anchor points • climb using documented safe work methods • inspect for faults and store ropes, harnesses and other climbing and safety equipment and replace if worn or faulty. • document the hazards identified and the risk controls selected.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole.	
Situations may include:	<ul style="list-style-type: none"> • complex tree climbing incorporates situations

RANGE STATEMENT	
	<p>made hazardous by tree branches vulnerable to failure under a load</p> <ul style="list-style-type: none"> • 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 tree's 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.
Climbing tools and equipment may include:	<ul style="list-style-type: none"> • ropes • safety harnesses • ascending and descending devices • ladders • safety equipment (helmets, ear and eye protection, gloves, boots, etc.) • pulleys and blocks • shackles and karabiners.

Unit Sector(s)

Unit sector	Arboriculture
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Co-requisite units

Co-requisite units	

Competency field

Competency field	
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