



Australian Government

AHCARB307 Use advanced climbing techniques

Release: 1

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Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to climb trees with ropes, harnesses and specialist equipment using advanced techniques for the purpose of mobility around the required sections of trees for work positioning.

This unit applies to individuals who have a range of cognitive, technical and communication skills to select and apply a specialised range of methods, ropes, equipment and information to complete routine activities and provide and transmit solutions to predictable and sometimes unpredictable problems. Discretion and judgement is required. The work requires the application of extensive arboricultural knowledge. Work is implemented with low risk work procedures and to comply with Safe Work Method Statement documentation.

Licensing, legislative, regulatory, or certification requirements apply to this unit in some states and territories at the time of publication, and may differ according to jurisdiction. Specific determination should be sought through the relevant State or Territory. Works involving this unit of competency may be subject to local tree protection and preservation laws, and the relevant content of applicable Australian Standards.

Pre-requisite Unit

AHCARB312 Use standard climbing techniques to access trees*

AHCARB311 Tie, dress, set and finish arborist knots

Unit Sector

Arboriculture (ARB)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare site and inspect equipment	1.1 Determine appropriate method for accessing tree – climbing or using an elevated work platform (EWP) – through discussion with

Element	Performance criteria
	work team 1.2 Determine location of above-and-below-ground services 1.3 Undertake a site-specific risk assessment by identifying work health and safety hazards and assessing risk 1.4 Confirm first aid and rescue personnel, equipment and procedures 1.5 Ensure work team member present, capable, willing and equipped to assist or perform aerial rescue operations 1.6 Prepare and carry out pre-operational and safety checks, on ropes, harnesses, tools and equipment 1.7 Select and use personal protective equipment 1.8 Record and implement work health, safety, site, environmental and traffic control measures
2. Select climbing equipment	2.1 Select harness and appropriate equipment for climbing 2.2 Inspect tree to determine low risk access route through discussion with work team and seek feedback 2.3 Estimate tree height and load in relation to safe working limits of ropes and equipment 2.4 Determine the hold, release and grip attributes of rope 2.5 Select and use static and dynamic rope as required 2.6 Select and use triple locking carabiners 2.7 Determine limits, relative advantages and disadvantages of friction hitches
3. Prepare to access tree	3.1 Tie, dress, set and finish climbing knots and hitches 3.2 Communicate with work team during operations using voice, hand and whistle signals 3.3 Maintain awareness of power line safe approach distances and vegetation clearances 3.4 Select low risk anchor points in accordance with strength, suitability requirements and branch weight
4. Prepare climbing spurs and gaffs for dismantling operations	4.1 Prepare climbing spurs and gaffs for dismantling operations 4.2 Check all components of climbing spurs for defects and wear 4.3 Check gaff tip profile for correct dimensions using gaff gauge 4.4 Sharpen gaff tip cutting edge with file at defined angle using gaff gauge 4.5 Adjust climbing spurs to provide correct operator fit 4.6 Access and perform dismantling work using climbing spurs 4.7 Maintain separation of spurs 4.8 Maintain clearance distance between spurs and ropes
5. Access and ascend tree	5.1 Access and ascend tree using low risk access route with harness

Element	Performance criteria
	and lanyard 5.2 Ascend using single rope, double rope and selected friction hitch as required 5.3 Ascend using uni-ascenders, foot and hand ascenders, and other ascension devices as required 5.4 Use micrograbs, grigris and micro-pulleys as required for mobility and work positioning 5.5 Demonstrate ability to carry out change-overs as required 5.6 Set up redirects and belays using slings and anchors as required 5.7 Select multiple lines to climb trees and tree parts as required 5.8 Select multiple lines to perform tree operations as required
6. Descend from tree	6.1 Descend tree in a controlled manner 6.2 Remove all access equipment in a controlled manner 6.3 Check, clean and store access equipment 6.4 Clean and store personal protective equipment

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is not equivalent to AHCARB307A Undertake complex tree climbing.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>