



Australian Government

Assessment Requirements for AHCARB311 Tie, dress, set and finish arborist knots

Release: 1

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Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence for and demonstrate:

- undertaking a site-specific risk assessment by identifying work health and safety hazards and assessing risk
- confirming first aid and emergency equipment and procedures applicable to tree work
- selecting and using appropriate personal protective equipment
- recording and implementing work health, safety, site, environmental and traffic control measures
- communicating with work team during operations using voice, hand and whistle signals
- determining work application for:
 - ground-based knots
 - aerial knots
 - rigging knots and
 - climbing knots
- determining appropriate knot for locking and non-locking attributes, strength, impact on rope strength, loosening and slippage
- determining loss of rope strength using selected knot
- determining appropriate rope for knot application
- determining requirements for secondary knots and stopper knots
- determining appropriate rope used for knot application
- tying knot to form intended knot
- leaving appropriate tail length approximately five times diameter of rope
- dressing knot to align all parts of knot
- setting knot to 'tighten and load' knot prior to use
- finishing knot with selected stopper knot as required
- inspecting completed knot

- checking knot for correctness of assembly
- confirming knot for correct work application
- maintaining effective communication with work team
- installing and using knot in work application
- untying knot at completion of work task
- clean and check ropes
- reporting and tagging faulty or worn ropes
- cleaning and storing personal protective equipment.

Knowledge Evidence

The candidate must demonstrate knowledge of:

- site-specific risk assessment
- first aid and emergency equipment and procedures
- personal protective equipment
- work health, safety, site, environmental and traffic control measures
- voice, hand and whistle signals
- work applications for knots
- knots for ground-based rigging tasks
- knots for aerial rigging tasks
- knots for climbing work tasks
- determination of appropriate knot by evaluation of knot attributes:
 - locking and non-locking attributes
 - impact on rope strength
 - loosening and
 - slippage
- determining loss of rope strength using selected knot
- determination of appropriate rope for knot application
- knot tying
- intended knot
- tail length
- diameter of rope
- alignment of knot parts
- knot setting
- knot tightening and loading
- stopper knot
- knot finishing
- correctness of assembly and use in application
- inspection, installation and use of knots
- effective work team communications
- tagging system
- checking and cleaning ropes.

Assessment Conditions

It is an industry requirement for the assessment of the knots appropriate to the work application as listed in the Range of Conditions section of this unit of competency.

Assessment must be demonstrated consistently over time in a suitable range of contexts and have a productivity-based outcome. No single assessment event or report is sufficient to achieve competency in this unit.

Assessment may be conducted in a simulated or real work environment, however determination of competency requires the application of work practices under work conditions.

The mandatory equipment and materials used to gather evidence for assessment include:

- equipment:
 - static and dynamic rope kit
 - personal protective equipment (PPE)
 - first aid and emergency kit
 - traffic management kit
- materials:
 - knot identification form
 - hazard identification and risk control form
 - equipment and PPE check form
 - emergency preparation form
 - work communications form

Assessors must satisfy current standards for RTOs in the assessment of arboriculture units of competency.

Assessment must be conducted only by persons who have:

- arboriculture vocational competencies at least to the level being assessed
- current arboriculture industry skills directly relevant to the unit of competency being assessed

Links

Companion Volume implementation guides are found in VETNet -

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