



Australian Government

AHCIRG331 Install pressurised irrigation systems

Release: 2

AHCIRG331 Install pressurised irrigation systems

Modification History

Release	Comments
Release 2	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 2.0.
Release 1	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 1.0.

Application

This unit of competency covers the skills and knowledge required to install low and sprinkler volume irrigation systems.

It applies to individuals who take responsibility for own work and for the quality of the work of others. They use discretion and judgement in the selection, allocation and use of available resources. All work is carried out to comply with workplace procedures.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Irrigation (IRG)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Organise resources for installation work	1.1 Select and use materials, tools, equipment and machinery 1.2 Check that parts and equipment match system drawings and specifications 1.3 Carry out pre-operational and safety checks on tools, equipment and machinery

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Identify work health and safety hazards, assess risks and implement suitable controls 1.5 Select, use and maintain suitable safety and personal protective equipment 1.6 Identify environmental considerations of irrigation installation activities 1.7 Check water supply to ensure that it is compatible with system specifications
2. Set out and prepare site	2.1 Measure and mark out irrigation lines 2.2 Confirm trenches are at the specified depth without damage to services, facilities, features and established plants 2.3 Observe regulations relevant to the situation 2.4 Use work practices that reflect sustainable horticulture principles and respond to local community requirements
3. Install irrigation components	3.1 Interpret the irrigation system plan and, where applicable, supervise contractors and monitor work to ensure it conforms to the plan 3.2 Assemble and connect components and complete and test joints 3.3 Fit and adjust fittings and valves and secure all joints 3.4 Maintain a clean and safe work area while installation work is carried out
4. Commission irrigation system	4.1 Calibrate testing and monitoring equipment 4.2 Confirm the start-up sequence is in accordance with the operations manual 4.3 Flush system as required 4.4 Identify operating faults and take corrective where required 4.5 Record work outcomes and report to supervisor
5. Complete installation work	5.1 Finish off earthworks 5.2 Confirm the system configuration and capacity matches the installation plan 5.3 Restore site and clear materials and equipment from the site on completion of maintenance works

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	5.4 Clean and store tools and equipment

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

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

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCIRG331 Install pressurised irrigation systems Release 2	AHCIRG331 Install pressurised irrigation systems Release 1	Minor typographical error corrected	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCIRG331 Install pressurised irrigation systems

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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 that they can:

- calibrate testing and monitoring equipment
- commission irrigation system
- complete installation work
- organise resources for installation work
- set out and prepare the site.

Knowledge Evidence

The candidate must demonstrate knowledge of:

- the behaviour of water on varying terrain and soil types
- calculations for installing irrigation systems
- characteristics and operation of joints, valves and sprinkler components
- components of an irrigation system
- methods and techniques of installing irrigation
- operation of pumps and water flow rates
- soil characteristics
- soil water retention testing techniques
- water quality and water filtration techniques.

Assessment Conditions

Assessors must satisfy current standards for RTOs.

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