



Australian Government

AHCHYD304 Install hydroponic systems

Release: 1

AHCHYD304 Install hydroponic systems

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Release 11.0.

Application

This unit of competency describes the skills and knowledge required to install recirculating or non-recirculating hydroponic systems.

The unit applies to individuals who install hydroponic systems under broad direction and take responsibility for their own.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace, and sustainability and biosecurity practices.

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

Pre-requisite Unit

Nil

Unit Sector

Hydroponics (HYD)

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare for installation	1.1 Interpret site plans and design specifications 1.2 Locate underground services according to site plans 1.3 Identify potential site problems 1.4 Identify potential hazards and risks, and implement safe working practices to manage risks

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	1.5 Identify environmental implications of installing the system according to environment and biosecurity legislation and regulations 1.6 Clear the site for installation 1.7 Select tools, equipment and materials required for installation work according to design and layout plans, and check for serviceability 1.8 Select, fit, use and maintain personal protective equipment (PPE) applicable to the task
2. Install a hydroponic system	2.1 Prepare site for and install drainage channels and water collection and storage facilities according to design specifications 2.2 Assemble system infrastructure according to design specifications 2.3 Install system components according to design and layout plans and manufacturer specifications 2.4 Communicate problems associated with installation to the client or manager
3. Test and calibrate the system	3.1 Check infrastructure and systems are in working order and meet specifications 3.2 Calibrate hydroponic equipment 3.3 Test the system 3.4 Complete checklist of all testing results
4. Complete installation operations	4.1 Clean debris from site 4.2 Dispose of or recycle waste material from site 4.3 Clean, maintain and store tools and equipment 4.4 Identify and report unserviceable tools and equipment according to workplace procedures

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.

Skill	Description
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Reading	Identify and interpret workplace information, site plans and design specifications to identify relevant and key information about hydroponic system installation
Writing	Use clear language, accurate industry terminology and logical structure to complete testing results checklist
Oral communication	- Use clear language to report malfunctions, faults, wear or damage to tools and equipment - Respond to questions and clarify information

Unit Mapping Information

Code and title current release	Code and title previous release	Comments	Equivalence status
AHCHYD304 Install hydroponic systems	AHCHYD302 Install hydroponic systems	Minor changes to application Minor changes to elements and performance criteria Foundation skills added Assessment requirements updated	Equivalent

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 AHCHYD304 Install hydroponic systems

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has installed hydroponic systems on at least one occasion, and has:

- interpreted site plans, design drawings and specifications
- installed a hydroponic system according to design specifications, instructions and directions
- applied relevant workplace health and safety and environment and biosecurity legislation, regulations and workplace procedures
- prepared materials, tools and equipment for installation
- prepared a site for installation of a hydroponic system
- installed components and structures associated with a hydroponic system
- tested and calibrated a hydroponic system
- completed checklist of test results
- cleaned, stored and maintained associated installation equipment and materials.

Knowledge Evidence

An individual must be able to demonstrate knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace requirements applicable to health and safety in the workplace for installing hydroponic systems
- environment and biosecurity legislation and regulations and workplace practices relevant to installing hydroponic systems
- principles and practices of hydroponic system installation, including:
 - environmental implications of the drainage of high nutrient effluents
 - head pressure and flow rates
 - legislation regarding the installation of hydroponic systems

- plant growing media choices and their properties
- recirculated and non-recirculated systems.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - work instructions and workplace procedures applicable to installing hydroponic systems
 - testing tools and equipment, and materials, tools and equipment applicable to installing hydroponic systems
 - PPE applicable to installing hydroponic systems
- specifications:
 - workplace requirements applicable to health and safety in the workplace for installing hydroponic systems
 - environment and biosecurity legislation and regulations and workplace practices applicable to installing hydroponic systems
 - site plans, design drawings and specifications applicable to installing hydroponic systems
- time frames:
 - according to job requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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