



Australian Government

Department of Education, Employment and Workplace Relations

AHCHYD302A Install hydroponic systems

Release: 1

AHCHYD302A Install hydroponic systems

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of installing recirculating or non-recirculating hydroponic systems and defines the standard required to: prepare a site for installation of a hydroponics system according to instructions and directions; prepare materials and equipment for installation; install components and structure associated with a hydroponic system; commission system according to instructions and directions; store and maintain associated installation equipment and materials.
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Application of the Unit

Application of the unit	This unit is likely to be under limited supervision from others, with checking only related to overall progress and is usually done within established routines, methods and procedures.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

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 installation	1.1. Site plans and design specifications are interpreted and clarified with the supervisor. 1.2. Underground services are identified according to site plans. 1.3. Site is assessed to identify any potential problems. 1.4. Occupational Health and Safety (OHS) hazards are identified, risks assessed and suitable controls implemented. 1.5. Environmental implications of installing the hydroponic system are identified. 1.6. The site is cleared for installation according to enterprise guidelines. 1.7. Equipment and materials required for installation are determined and arranged according to design and layout plans.
2. Install a hydroponic system	2.1. Site is prepared for the installation of drainage channels and water collection, and storage facilities according to design specifications. 2.2. Install drainage components and water collection, and storage facilities according to design specifications. 2.3. Hydroponic system infrastructure is assembled according to design specification. 2.4. Hydroponic system components are installed according to design and layout plans and manufacturers specifications. 2.5. Any problems associated with installation are communicated to the client and/or manager.
3. Test and calibrate the system	3.1. Hydroponic infrastructure and systems are checked to ensure they are in good working order and meet required specifications. 3.2. Hydroponic equipment is calibrated to ensure readings are accurate. 3.3. Media is installed according to enterprise guidelines. 3.4. The hydroponic system is test run ready for the planting of the crop. 3.5. Check list of all testing results is completed and approved by client/management.
4. Complete installation operations	4.1. All tools and equipment are cleaned and stored according to enterprise guidelines. 4.2. Site is tidied and waste is removed and disposed of

ELEMENT	PERFORMANCE CRITERIA
	in a manner that minimises risk of damage to the environment.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- identify hazards and implement safe operating procedures
- test and calibrate hydroponic equipment
- remove any waste material from site in an environmentally safe and sensitive manner
- 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

- recirculated and non-recirculated systems
- media choices and their properties
- legislation regarding the installation of hydroponic systems
- head pressure and flow rates
- environmental implications of the drainage of high nutrient effluents.

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

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:

- prepare a site for installation of a hydroponics system according to instructions and directions
- prepare materials and equipment for installation
- install components and structure associated with a hydroponic system
- commission system according to instructions and directions
- store and maintain associated installation equipment and materials.

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.

System may include:

- recirculating or non-recirculating hydroponic systems in glasshouses or shade houses.

Unit Sector(s)

Unit sector	Hydroponics
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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