



Australian Government

AHCPER327 Install structures for permaculture systems

Release: 1

AHCPER327 Install structures for permaculture systems

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 9.0.

Application

This unit of competency describes the skills and knowledge required to interpret and follow plans to build and install permaculture structures and features for a permaculture system.

The unit applies to individuals who work under broad direction and take responsibility for their own work, including limited responsibility for the work of others. They use discretion and judgement in the selection and use of available resources, and complete routine activities.

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

Pre-requisite Unit

Nil

Unit Sector

Permaculture (PER)

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. Plan and prepare for structural work	1.1 Interpret plans and verify specifications with stakeholder 1.2 Confirm construction method and resource requirements with stakeholder 1.3 Verify compliance with regulatory requirements according to workplace procedures 1.4 Identify quantity and quality of materials from design drawings and specifications

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.5 Check and dress reclaimed materials to comply with specifications 1.6 Check size and quality of supplied materials against specifications 1.7 Report or replace substandard materials according to workplace procedures 1.8 Select, check and prepare tools and equipment for construction work 1.9 Identify health and safety hazards, assess risk, and implement controls according to workplace health, safety and environmental procedures
2. Set out the site for structure	2.1 Determine location of underground and overhead services from site plans and observations 2.2 Implement procedures to protect services from damage 2.3 Survey, locate and mark position of structure according to design plans 2.4 Undertake excavation works according to design specifications 2.5 Stockpile and prepare excavated material
3. Prepare construction materials ready for assembly	3.1 Arrange construction materials on site for efficient access 3.2 Measure and prepare individual components of structure according to design plans and specifications 3.3 Organise individual components in preparation for assembly
4. Assemble and erect structure	4.1 Install formwork and supports according to construction method 4.2 Assemble and fix materials into position according to design plans 4.3 Verify structural accuracy against plans and specifications 4.4 Report or rectify out-of-specification assembly components 4.5 Apply surface coatings and finishes according to specifications
5. Check quality of work and clean up site	5.1 Remove and dispose of waste from construction site according to workplace environmental procedures 5.2 Store unused materials 5.3 Clean, maintain and store tools and equipment according to workplace procedures 5.4 Inspect and confirm finished work with stakeholder

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
Reading	Interpret plans, specifications and other documentation, and consolidate information to determine requirements for installation and construction of permaculture structures
Numeracy	- Accurately measure lengths, angles and levels to construct permaculture structures according to design specifications - Estimate materials and resources for permaculture structure to ensure resources are available and waste is minimised

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCPER327 Install structures for permaculture systems	AHCPER310 Install structures for permaculture systems	Minor change to Application Changes to Elements and Performance Criteria to allow for broader range of construction materials and elements Changes to Performance Evidence, Knowledge Evidence and Assessment Conditions for clarity Addition of Foundation Skills	Not 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 AHCPER327 Install structures for permaculture 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 prepared and installed structures for permaculture systems from design plans for at least two of the following types of structures:

- garden structure or feature
- fence or trellis
- animal house or shelter
- netted protection for plants
- paving and decking
- compost bin
- worm-farm
- retaining wall not requiring a permit
- small shed or outbuilding
- building component.

There must also be evidence that the individual has:

- interpreted permaculture design drawings and specifications
- checked regulatory requirements for construction
- identified the construction method
- selected and prepared materials for construction method, which must include at least three of the following materials:
 - new or reclaimed timber
 - bamboo
 - straw
 - earth
 - new or reclaimed housing components
 - hard landscape materials

- wire, mesh or nets
- metal
- glass or clear synthetic materials
- identified hazards, assessed risks and implemented controls, including checked for underground and overhead services
- surveyed site, and located and marked out location of structure
- measured component materials accurately during preparation and assembly
- assembled structure according to plans
- checked and confirmed permaculture structure with client.

Knowledge Evidence

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

- permaculture principles regarding structures and built environment
- permaculture design drawings, plans and specifications, including:
 - plan interpretation
 - construction and detail drawings
 - extracting construction data from plans
- building regulations and compliance for simple structures
- basic surveying techniques for small scale construction works, including:
 - measuring slope, fall and contours
 - linear measurements
 - use and operation of basic survey equipment
- typical permaculture structures
- hand and power tools, including:
 - pre-use checks, maintenance and operation
 - safety requirements
- workplace health and safety procedures and site safety, including:
 - excavation risks and underground services
 - overhead services
 - safe lifting and transporting techniques
 - personal protective clothing and equipment (PPE)
 - use and installation of safety signs and barriers
 - site access points
- environmental implications associated with excavation and construction activity, including:
 - implication of alteration to water flow
 - waste disposal
 - natural environment
- measuring and mixing composite and aggregate materials, including:

- concrete and mortar
- earth and straw
- rammed and stabilised earth walls.

Assessment Conditions

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

- physical conditions:
 - skills must be demonstrated at a permaculture site or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - hand and power tools and equipment for installing permaculture structures
 - personal protective equipment
 - building materials and consumables
- specifications:
 - workplace procedures and processes
 - manufacturer operating instructions for equipment and machinery
 - permaculture structure design plans and specifications
 - site service location plans
 - construction permits according to structure design
- relationships:
 - stakeholder/s.

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

Links

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