



**Australian Government**

**Assessment Requirements for AHCPER317  
Build with earth, straw and reclaimed  
materials**

**Release: 1**

# Assessment Requirements for AHCPER317 Build with earth, straw and reclaimed materials

## 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 that they can:

- research building methods
- prepare for the building project
- build with earth, straw and/or reclaimed materials
- limit and re-use surplus and waste materials
- ensure the standard of the finished built structure is appropriate to the permaculture design

## Knowledge Evidence

The candidate must demonstrate knowledge of:

- permaculture principles regarding structures and the built environment
- Building methods, such as
  - mud brick
  - straw bale
  - cobb & light earth
  - rammed earth (Pise)
  - wattle and daub
  - stabilised/compressed earth brick
  - earth ship
  - aerated concrete
  - compressed paper and timber fibres
  - wool brick
  - air dried timber
- structural issues
- planning issues

- properties of materials and suitability of local soils and timbers for building uses
- environmental, logistical and safety factors, such as:
  - issues related to harvesting and milling of local timbers
  - possible contaminants in or on materials
  - weight and size of materials and their transport to the site
- reclaimed materials, such as:
  - commercial timber off-cuts and wastes
  - demolition materials (timbers, windows and doors, plumbing fittings, roofing materials, bricks and other masonry items)
  - railway sleepers, telegraph poles, bridge timbers and other heavy reclaimed timbers
  - metal mesh and grill-work (fridge and oven shelves, wire baskets, fence panels, bed frames and bases, chicken wire, aviary mesh, pig/dog wire and other wire mesh products in small or large quantities)
  - reinforcing mesh and rods, trench mesh
  - pallets and packaging crates
  - shipping containers, ex-transport carriages, old cars, trailers and caravans
  - mirrors
  - bottles (glass and plastic)
  - ceramics and flower pots
  - car & truck tyres, windscreens, panels and seats
  - machinery parts
  - drums and cans
  - palings and weatherboards
  - reclaimed concrete
- typical permaculture structures, such as
  - garden structures and features
  - fences and trellising
  - animal housing and shelters
  - seating and garden walls
  - retaining walls and small dam walls (including observing all regulatory conditions)
  - sheds or small outbuildings (including observing all regulatory conditions)
  - components of houses or other buildings ((including observing all regulatory conditions and work with professionals on larger structures)
- the correct use of hand and power tools and other work health and safety requirements associated with installing structures and features
- techniques for working with reclaimed materials such as de-nailing, stripping old paint, dressing timber
- WHS considerations associated with recycled materials such as identification of lead paint, broken glass, rusty metal, chemically treated materials
- comparative environmental implications associated with excavation and construction activity

- safe lifting and transporting techniques
- appropriate use of personal protective clothing and equipment (PPE)
- appropriate use and installation of safety signs and barriers
- site access points
- implication of alteration to water flow during and after construction

## **Assessment Conditions**

Assessors must satisfy current standards for RTOs. Assessors must also hold a nationally accredited Certificate III (or higher) in Permaculture. Completion of a Permaculture Design Course (PDC) is not sufficient at this level.

## **Links**

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>