

Unit of Competency CPCPRF3027

Select and install a heritage roof system

Application

This unit specifies the skills and knowledge to select and install a heritage roof system.

In some jurisdictions, this unit of competency may form part of accreditation, licensing, legislative, regulatory or certification requirements.

Prerequisite Units

CPCPCM2043 Carry out WHS requirements

CPCPCM2055 Work safely on roofs

Elements and Performance Criteria

1. Identify installation requirements.	<ul style="list-style-type: none">1.1 Access, read and determine heritage roof sheeting installation requirements from job specifications, relevant Australian Standards, codes, manufacturers' instructions and jurisdictional requirements1.2 Identify and apply workplace, work health and safety (WHS), environmental and sustainability requirements associated with selecting and receiving materials and installing heritage roofing systems.1.3 Check whether the materials used are compatible with the surrounding environment and other materials within the installation.1.4 Determine heritage material types and calculate quantities from plans and specifications.
2. Receive delivery of materials.	<ul style="list-style-type: none">2.1 Provide safe access for delivery vehicles and onsite workers.2.2 Check conformity of materials against the delivery docket and specifications and report any shortfalls or damage.2.3 Secure materials and protect from moisture and mechanical damage.
3. Prepare for work.	<ul style="list-style-type: none">3.1 Identify and check serviceability of plant, equipment and tools required for installation and maintenance activities.3.2 Select, fit and use appropriate personal protective equipment (PPE).
4. Install heritage roof sheeting.	<ul style="list-style-type: none">4.1 Measure, cut and fix relevant substrate or roof battens for heritage roofing installation at correct spacings to match plans and job requirements.4.2 Measure, cut, weather and install heritage roof sheets using appropriate fastening spacing and methods.4.3 Remove any swarf at end of installation.
5. Fabricate and install flashings.	<ul style="list-style-type: none">5.1 Fabricate the required heritage roof flashings.5.2 Measure, cut, fasten and seal the flashing onto a heritage roof structure matching plans and job specifications.
6. Clean up.	<ul style="list-style-type: none">6.1 Remove any swarf off cladding, flashings and gutters.6.2 Clear any rivet stems and fasteners.

	6.3	Clear the work area and dispose of, reuse or recycle materials in accordance with state or territory legislation and workplace requirements.
	6.4	Clean tools and equipment, check for serviceability and report any damage, and store and secure.

Foundation skills

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

Unit Mapping Information

No equivalent unit.

Links

Companion Volume Implementation Guide:

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>

Assessment Requirements for CPCPRF3027

Select and install a heritage roof system

Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by:

- installing either copper, lead or galvanised roof cladding to a roof structure not less than 2 metres wide and 1.5 metres long:
 - installing onto appropriate substrate or hardwood timber battens to suit heritage roofing support methods
 - installing a flat or pitched roof system using an approved fixing and sealing method as per heritage requirements
 - selecting and installing 4 short sheet lengths applying laying pattern and end-lap protection
- fabricating and installing the following flashings not less than 600 mm long:
 - one hip or ridge intersection flashing using bossed lead
 - a galvanised steel intersection valley with a soldered saddle
 - a chimney flashing, including soaker tray, back gutter, and hanging and stepped flashing using either lead, zinc or galvanised steel
 - a rolled barge gable intersection with conical end capping
- fabricating and installing at least 600 mm length of galvanised OR lead box gutter including soldered stop ends, round spout, overflow and an external OR internal 45 OR 300 degree angle
- fabricating and installing a round galvanised downpipe offset with soldered joints
- fabricating and installing a bossed OR welded lead collar flashing to suit a 50 mm round penetration
- fabricating and installing a rainwater head from one of the following:
 - zinc, copper or galvanised steel and soldered
 - manufactured in lead, and welded
 - manufactured galvanised
 - copper finial.

Knowledge Evidence

To be competent in this unit, a person must demonstrate knowledge of:

- plans and specifications
- current standards and codes for roof sheeting and insulation:
 - HB39 *Installation code for metal roof and wall cladding*
 - National Construction Code (NCC)
- receiving roofing materials
- materials and details required to replace heritage roof systems

- heritage cladding profiles, coatings and material-grade roof components:
 - o batten types to match existing including Oregon and hardwood
 - o lead or galvanised flashing into brickwork or chimneys
 - o heritage fixings, fasteners and seals
 - o heritage sealing methods
 - o vents, finials and decorative features
 - o hand bossing
 - o lead welding
 - o compatibility of materials weathering
 - o ventilation
- how to access relevant information, including codes and standards to select and install a heritage roof system
- tools, materials and equipment used to select and install a heritage roof system
- work health and safety (WHS) requirements for installing and maintaining a heritage roof system.

Assessment Conditions

Assessors must satisfy the requirements for assessors listed in the Standards for Registered Training Organisations.

This unit must be assessed in the workplace or a close simulation using realistic workplace conditions, materials, activities, responsibilities, procedures, safety requirements and environmental considerations.

Links

Companion Volume Implementation Guide:

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>