CPCCCA3008B Construct eaves

Modification History
Photovoltaic (solar) panels added to range statement
Equivalent to CPCCCA3008A

Unit Descriptor
This unit of competency specifies the outcomes required to prepare, set out and construct eaves, including the cutting and fixing of fascias and barges to provide a finish between the wall and the roof. It includes boxed eaves and the finish to gable ends.

Application of the Unit
This unit of competency supports achievement of skills constructing eaves for roof finishing in a range of construction projects, which includes working with others and as a member of a team.

Licensing/Regulatory Information
Not Applicable

Pre-Requisites
CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry
Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1 Plan and prepare

1.1 Work instructions, including plans, specifications, quality requirements and operational details, are obtained, confirmed and applied from relevant information for planning and preparation purposes.

1.2 Safety (OHS) requirements are followed in accordance with safety plans and policies.

1.3 Signage and barricade requirements are identified and implemented.

1.4 Plant, tools and equipment selected to carry out tasks are consistent with job requirements, checked for serviceability, and any faults are rectified or reported prior to commencement.

1.5 Material quantity requirements are calculated in accordance with plans, specifications and quality requirements.

1.6 Materials appropriate to the work application including required fire resistance rating are identified, obtained, prepared, safely handled and located ready for use.

1.7 Environmental requirements are identified for the project in accordance with environmental plans and statutory and regulatory authority obligations, and are applied.

1.8 Passive and active fire control elements for eaves
construction are identified and applied.

2 Install fascia and barge

2.1 Overhang of rafters is marked and cut to line, plumb and angle.

2.2 Gable ends are trimmed for overhang where a verge rafter is not used.

2.3 Fascia is fitted and fixed to roof structure overhang to line and level.

3 Construct framework for eaves or soffits

3.1 Framework structure for eaves type are identified, and eaves design is established and set out to drawings and specifications.

3.2 Timber framework members are set out, marked and cut to lengths in accordance with methods of joining and proposed framework structure.

3.3 Boxed eaves constructed with soffit bearers are fixed to wall frame or supported by hangers from rafters, to line and level.

3.4 Boxed eaves structure is installed, clear of top of masonry walls in veneer construction to allow for frame shrinkage and settlement.

3.5 Eaves structure members are securely fixed, including back blocking and trimmers.

4 Line and clad eaves and soffits

4.1 Eaves cladding and sheeting material is marked and cut to shape to suit task application and jointing methods.

4.2 Eaves lining, cladding and sheeting are fitted, joined and fixed in accordance with type of material, task application and specifications.

4.3 Mouldings are fitted and fixed to specifications to finish eaves.

4.4 Sloping eaves are fitted to underside of rafters or framing for fixing and joining of material.
5 Clean up

5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.

5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.
Required Skills and Knowledge

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

Required skills

Required skills for this unit are:

- communication skills to:
  - determine requirements
  - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
  - follow instructions
  - read and interpret:
    - documentation from a variety of sources
    - plans, specifications and drawings
  - report faults
  - use language and concepts appropriate to cultural differences
  - use and interpret non-verbal communication, such as hand signals
- numeracy skills to apply measurements and make calculations
- organisational skills, including the ability to plan and set out work
- teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities
- technological skills to:
  - use a range of mobile technology, such as two-way radio and mobile phones
  - voice and hand signals to access and understand site-specific instructions.

Required knowledge

Required knowledge for this unit is:

- construction terminology
- eaves construction techniques, including fire control and separation required by the National Construction Code (NCC) and other legislation
- eaves materials, including their rated fire resistance
- job safety analysis (JSA) and safe work method statements
- levelling techniques
- material safety data sheets (MSDS)
- materials storage and environmentally friendly waste management
- plans, specifications and drawings
- plant, tools and equipment types, characteristics, uses and limitation
• processes for the calculation of material requirements
• quality requirements for eaves construction
• roof geometry and construction
• safe use of scaffolding
• timber types, structural properties and uses, including engineered timber products
• wall framing construction
• workplace and equipment safety requirements.

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

This unit of competency could be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

A person who demonstrates competency in this unit must be able to provide evidence of the ability to:

• locate, interpret and apply relevant information, standards and specifications
• comply with site safety plan, OHS regulations and state and territory legislation applicable to workplace operations
• comply with organisational policies and procedures, including quality requirements
• safely and effectively use tools, plant and equipment
• communicate and work effectively and safely with others
• completion of marking and cutting of roof members to line to accommodate plumb fascia and barge for three metres of overhand barge eaves, three metres of boxed eaves and three metres of raking eaves, ensuring correct selection and use of fire-rated
materials and methods of construction, each to include:

- an apex junction on the barge
- a junction between the barge and the plumb fascia
- a junction at the valley
- an eaves junction at the hip to a brick wall.

**Context of and specific resources for assessment**

This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.

Assessment of essential underpinning knowledge will usually be conducted in an off-site context.

Assessment is to comply with relevant regulatory or Australian standards' requirements.

Resource implications for assessment include:

- an induction procedure and requirement
- realistic tasks or simulated tasks covering the mandatory task requirements
- relevant specifications and work instructions
- tools and equipment appropriate to applying safe work practices
- support materials appropriate to activity
- workplace instructions relating to safe work practices and addressing hazards and emergencies
- material safety data sheets
- research resources, including industry related systems information.

Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.

**Method of assessment**

Assessment methods must:

- satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Training Package
- include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and
correctly interpret the essential underpinning knowledge required for practical application

- reinforce the integration of employability skills with workplace tasks and job roles
- confirm that competency is verified and able to be transferred to other circumstances and environments.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person’s demonstrated ability and applied knowledge
- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence.

Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.

Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Information includes:

- diagrams or sketches
- instructions issued by authorised organisational or external personnel
- manufacturer specifications and instructions where
specified
• memos
• MSDS
• organisation work specifications and requirements
• plans and specifications
• regulatory and legislative requirements pertaining to constructing eaves
• relevant Australian standards
• safe work procedures related to constructing eaves
• signage
• verbal or written and graphical instructions
• work bulletins
• work schedules.

Planning and preparation include:
• work site inspection
• equipment defect identification
• assessment of conditions and hazards
• determination of work requirements.

Safety (OHS) is to be in accordance with state or territory legislation, regulations, codes of practice, organisational safety policies and procedures, and project safety plan and may include:
• emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation
• handling of materials
• hazard control
• hazardous materials and substances
• safe operating procedures, including the conduct of operational risk assessment and treatments associated with:
  • earth leakage boxes
  • lighting
  • photovoltaic (solar) panels
  • power cables, including overhead service trays, cables and conduits
  • restricted access barriers
  • surrounding structures
  • traffic control
  • trip hazards
  • work site visitors and the public
  • working at heights
  • working in confined spaces
  • working in proximity to others
- working with dangerous materials
- organisational first aid
- personal protective clothing and equipment prescribed under legislation, regulations and workplace policies and practices
- use of firefighting equipment
- use of tools and equipment
- workplace environment and safety.

**Tools and equipment** include:

- air compressors and hoses
- bevels
- chisels
- hammers
- hand saws
- marking equipment
- measuring tapes and rules
- nail bags
- nail guns
- power drills
- power saws and power leads
- protractors
- saw stools
- scaffolding
- spirit levels
- squares (combination/tri)
- stair clips and tables
- steel squares and fence
- string lines.

**Quality requirements** include relevant regulations, including:

- Australian standards
- internal company quality policy and standards
- manufacturer specifications, where specified
- workplace operations and procedures.

**Materials** include:

- beads
- fibre cement sheeting
- joining mould
- metal
- plaster
- quads
• reconstituted timber products
• timber
• timber battens
• timber lining boards.

Environmental requirements
include:
• clean-up protection
• noise and dust
• vibration
• waste management.

Statutory and regulatory authorities
include:
• federal, state and local authorities administering applicable Acts, regulations and codes of practice.

Gable ends:
• can be boxed or raked and raked eaves
• includes exposed rafters or soffit finish.

Fascia (and fascia gutter and barges) include:
• methods include ensuring compliance with incipient spread of fire requirements methods
• timber or metal and overhang types, including conventional fascia gutter and concealed.

Eaves design:
• includes sloping soffits and boxed eaves
• may incorporate verandas, concealed gutters and open eaves.

Joined includes:
• jointing methods involving plastic, timber or metal moulds.

Unit Sector(s)
Functional area
Unit sector Construction
Co-requisite units

Co-requisite units      Nil

Functional area

Functional area