

CONSTRUCTION ROOF STRUCTURE

UNIT CODE: CON/OS/BUT /CR/04/5/A

UNIT DESCRIPTION:

This Unit describes the competencies required to execute roof construction. It involves identifying type of roof, interpreting roof plan, performing setting out, constructing trusses and executing roof finishes.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT These describe the key outcomes which make up workplace functions	PERFORMANCE CRITERIA These are assessable statements which specify the required level of performance for each of the elements <i>(Bold and italicized terms are elaborated in the range)</i>
1. Identify and interpret type of roof	1.1 <i>Type of the roof</i> is identified as per specification 1.2 <i>Members</i> are identified as per the roof plan. 1.3 <i>Roof covering materials</i> are identified as per the specification.
2. Perform Roof setting out	2.1 <i>Tools and equipment</i> for setting out are identified as per the roof specification. 2.2 Method of setting out is identified according to the roof specification. 2.3 Roof is set out as per job requirement
3. Construct truss structure	3.1 <i>Joints</i> are cut as per the specifications. 3.2 <i>Members</i> are assembled as per the specifications 3.3 <i>Trusses</i> are erected as per job requirement 3.4 <i>Purlins</i> are fixed as per the specification
4. Execute roof finishes	4.1 <i>Fascia boards</i> are fixed as per specification 4.2 <i>Roof covering</i> is fixed as per the specification 4.3 <i>Rain water goods</i> are installed

RANGE

This section provides work environment and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

Variable	Range
1. 1. Type of the roof include but are not limited to:	<ul style="list-style-type: none"> • Hipped roof • Gable roof • lean to roof
2. Members include but are not limited to:	<ul style="list-style-type: none"> • Kingpost • Queen post • Rafters • Tie beam • Wall plates • Fascial boards • Strut and ties • Purlin

	<ul style="list-style-type: none"> • Battens
3. Roof covering materials include but are not limited to:	<ul style="list-style-type: none"> • Thatches • Iron sheets • Bricks tiles • Concrete • Shingles
4. Tools and equipment include but are not limited to:	<ul style="list-style-type: none"> • Hand tools • Strings • Level
5. Joints include but are not limited to:	<ul style="list-style-type: none"> • Birds mouth • Scarf • Half lap • Mitre • Plumb cut
6. Rain water goods include but are not limited to:	<ul style="list-style-type: none"> • Gutters • Down pipes • Swan neck • Shoe • Elbow • Bends • Gutter ends • Connectors • Gutter holders

REQUIRED KNOWLEDGE AND SKILLS

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

Required knowledge

The individual needs to demonstrate knowledge of:

- Occupational Health and Safety
- Technical Drawing
- Building Drawing
- Mensuration
- Construction plants and equipment
- Construction materials
- General Building Construction
- Site and workshop management
- Carpentry and Joinery

Required skills

The individual needs to demonstrate the following skills:

- Communication skills

- Problem solving skills
- Analytical skills
- Numeracy skills
- concrete mixer operation
- Critical thinking
- Construction tools handling skills
- Analytical

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills range.

1. Critical aspects of competency	Assessment requires evidence that the candidate: 1.1 Identified type of the roof as per specification 1.2 Identified members as per the roof plan. 1.3 Cut joints as per specifications 1.4 Fixed roof covering as per the specification 1.5 Installed rain water goods.
2. Resource implications	The following resources should be provided: 2.1 Access to relevant workplace where assessment can take place. 2.2 Appropriately simulated environment where assessment can take place. 2.3 Resources relevant to proposed activity or task.
3. Methods of assessment	Competency in this unit may be assessed through: 3.1 Practical assignment 3.2 Written 3.3 Oral interview 3.4 Demonstrations 3.5 Observation
4. Context of assessment	Competency may be assessed: 4.1 On-the-job 4.2 In a simulated workplace setting
5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector and workplace job role is recommended.