

## **Competency Standards for Caribbean Vocational Qualifications (CVQ)**

**CCBCG20302**

**Level II in Painting and Decorating**

<b>Unit Number</b>	<b>Unit Title</b>	<b>Mandatory /Elective</b>	<b>Hours</b>
BCGCOR0001A	Carry out interactive workplace communication	Mandatory	20
BCGCOR0011A	Carry out OH&S requirements	Mandatory	40
BCGCOR0021A	Plan and organise work	Mandatory	20
BCGCOR0031A	Draw and interpret simple drawings	Mandatory	20
BCGCOR0041A	Carry out measurements and calculations	Mandatory	20
BCGCOR0051A	Use hand and power tools	Mandatory	20
BCGCOR0061A	Use small plant and equipment	Mandatory	40
BCGCOR0071A	Erect and dismantle restricted height scaffolding	Mandatory	40
BCGCOR0081A	Use simple levelling devices	Mandatory	10
ITICOR0011A	Carry out data entry and retrieval procedures	Mandatory	40
BCGCOR0111A	Handle construction materials and safely dispose of waste	Mandatory	10
BCGPAD0191A	Prepare for painting and decorating	Mandatory	40
BCGCOR0212A	Prepare surfaces	Mandatory	40
BCGPAD0772A	Apply paint by spray	Mandatory	60
BCGPAD1282A	Apply paint by brush/roller	Mandatory	80
BCGPAD1322A	Prepare surfaces for painting and decorating	Mandatory	40
BCGMAS0091A	Carry out excavation and install support	Elective	20
BCGMAS0101A	Carry out concreting to simple forms	Elective	20
BCGTIL0121A	Prepare for wall and floor tiling	Elective	40
BCGMAS0131A	Prepare for solid plastering	Elective	40
BCGMAS0141A	Prepare for dry wall plastering	Elective	40
BCGMAS0151A	Prepare for construction process (brick/block laying)	Elective	40
BCGCAR0161A	Prepare for carpentry construction	Elective	40
BCGCAR0202A	Assemble simple partition frames	Elective	30
BCGSTW0222A	Oxy- acetylene cutting	Elective	20
BCGCOR0272A	Operate elevated work platforms (EWP)	Elective	10
BCGMAS0292A	Carry out concrete work	Elective	40
BCGCAR0302A	Remove/replace door and window hardware	Elective	10
BCGCAR0312A	Use static machines	Elective	30
BCGCAR0322A	Make set- outs	Elective	20
BCGMAS1242A	Apply solid render	Elective	40
BCGPAD1332A	Apply wallpaper	Elective	40
BSBSBM0012A	Craft personal entrepreneurial strategy	Elective	50
BCGCAR0623A	Replace glass	Elective	20
BCGPAD0763A	Apply decorative finishes	Elective	120
BCGPAD0783A	Apply texture coatings	Elective	40
BCGPAD1133A	Apply/install waterproofing and damp-proofing	Elective	40
BCGPAD1293A	Match specified paint colour	Elective	60
BCGPAD1353A	Apply industrial protective coatings	Elective	40
BCGPAD1533A	Apply waterproofing for wall and floor tiling	Elective	40

To be awarded this Caribbean Vocational Qualification (CVQ) all Mandatory competency standards must be achieved. Electives achieved with the qualification will be awarded unit statement of competency.

The nominal training hours are a guide for planning the delivery of Training Programmes.

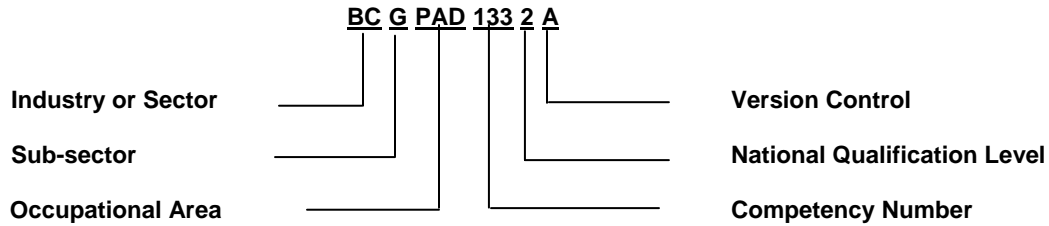
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**Legend to Unit Code**

**Example: BCGPAD1332A**



**KEY: Man – Mandatory; MAS – Masonry; SBM -Small Business Management; BSB – Business Services (Business); ITI – Information & Communication (Information Technology)  
CAR – Carpentry; STW – Steelwork; PAD – Painting & Decorating; TIL – Tiling  
BCG – Building Construction (General)**

**BCGCOR0001A: Carry out interactive workplace communication**

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively perform interactive communication at the workplace, and applies to all individuals working in the construction industry.

Competency Field:

General Construction

ELEMENT OF COMPETENCY	PERFORMANCE CRITERIA
1. Receive and convey information	1.1 Verbal/written instructions received and responded to with correct actions. 1.2 Instructions conveyed and work signage responded to, with correct action. 1.3 Information conveyed in basic English so that messages are understood.
2. Carry out face-to-face routine communication	2.1 Routine instructions, messages and schedules are given or followed. 2.2 Workplace procedures are carried out according to procedures laid down by the company or supervisor. 2.3 Relevant information is assessed and analysed from a range of sources. 2.4 Information is selected and sequenced correctly.
3. Work with others	3.1 Suggestions and information are provided relevant to the planning/conduct of the activities. 3.2 Communication carried out clearly, concisely and effectively so those messages are understood.
4. Participation in simple on-site meeting processes	4.1 Participation in on-site meetings is in accordance to predetermined procedures. 4.2 Interaction carried out to achieve constructive outcome.

## RANGE STATEMENT

This unit applies to all communication requirements, associated with working with other persons at a site location and carrying out tasks under supervision.

Verbal/written instructions include directions or instructions related to a simple job/task.

Signage may include but are not limited to:

- on-site direction signs
- common site warning signs
- facility or location signs
- traffic signs

Range of information sources may include:

- instructions: oral/memos
- signage
- work schedules/work bulletins
- charts and maps

On-site meeting process may take the form of formal or informal meetings and may include:

- notification (time, place, purpose)
- item discussion
- negotiation outcome

## EVIDENCE GUIDE

Competency is to be demonstrated by the effective use of methods of communication relating to instructions, information sources and meeting procedures listed within the range statement relative to the work orientation.

### (1) Critical Aspects and Evidence

It is essential that competence be observed in the following aspects:

- communications to include Occupational Health and Safety regulations applicable to work place operations, and organisational policies and procedures
- demonstrate appropriate communications processes prior to and during construction activities

### (2) Pre-requisite Relationship of Units

- Nil

### (3) Underpinning Knowledge and Skills

#### Knowledge

knowledge of:

- workplace safety requirements
- types of onsite meetings and their procedures
- how work schedules, charts, work bulletins and memos are used
- how instructions are conveyed in the workplace

#### Skills

The ability to:

- follow instructions for working safely
- convey information in basic English to invoke correct actions

**(4) Resource Implications**

The following resources should be made available:

- Suitable work area appropriate to the construction process
- Appropriate communication documentation relative to the task

**(5) Method of Assessment**

Competence should be assessed through direct observation and questions related to underpinning knowledge.

Competency in this unit may be determined concurrently, based upon project work.

Competency shall be assessed while work is being done under general guidance, checking at various stages of the process and at the completion of the activity, against the performance criteria and specifications.

**(6) Context of Assessment**

Competency shall be assessed in the normal or simulated workplace environment and in accordance with safe work procedures.

Assessment shall include those aspects that are consistent with the work environment of this unit.

Competency shall be assessed while work is undertaken autonomously, within a team environment.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of the process.

Guidelines will be in line with statutory requirements, the specific policies, procedures and codes of practice of the enterprise.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills

**BCGCOR0011A: Carry out OH&S requirements**

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively perform work activities to conform to Occupational Health and Safety requirements, and applies to all individuals working in the construction industry.

Competency Field:

General and Civil Construction

**ELEMENT OF COMPETENCY PERFORMANCE CRITERIA**

1	Plan and prepare for safe work practices	1.1	Quality assurance requirements associated with company's safety operations recognised and adhered to.
		1.2	Appropriate personal protective equipment selected, correctly fitted and/or made ready for use.
		1.3	Tools and equipment selected consistent with safe work practice requirements of job, checked for serviceability and any faults reported to supervisor.
		1.4	Appropriate barricades, hoardings and signage erected, where applicable, at required job location.
2	Use safe work practices to carry out work	2.1	Work carried out safely and in accordance with Statutory regulations for OH&S requirements and company policy.
		2.2	Safety hazards and workplace accidents/incidents identified in course of work and reported in accordance with company policy.
		2.3	Industry/site safety responsibilities known and applied.
		2.4	Fire fighting equipment selected and operated correctly according to type of fire.
		2.5	Current site emergency and first aid procedures known and followed.
		2.6	Signals/sirens for blasting operations recognised and adhered to.

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| 3 | Assume responsibility for safety of self and others | 3.1 | Appropriate protective equipment correctly selected fitted and used.  |
|   |   | 3.2 | Safe manual handling techniques used and guidelines for lifting and placing followed.                                     |
|   |   | 3.3 | All safety signs, symbols and alarms adhered to.  |
|   |   | 3.4 | Safety procedures for pre-use check and operation of specified power tools/plant, machinery and equipment followed.       |
|   |   | 3.5 | Recommended safe practices in handling chemical and potentially hazardous materials followed.                             |
| 4 | Work from ladder and work platforms                 | 4.1 | Ladder and work platforms safely erected in planned location.   |
|   |   | 4.2 | Care taken to avoid overhead power lines and other obstructions.  |
|   |   | 4.3 | Head and base of ladder or work platform support secured against accidental movement.                                     |
|   |   | 4.4 | Work safely performed from ladder and work platform.  |
|   |   | 4.5 | Appropriate fall arrest equipment utilised in accordance with current OH&S guidelines.                                    |
| 5 | Use electrical power supply safely                  | 5.1 | Position of power pole/box identified for safe placement of leads.  |
|   |   | 5.2 | Framework support positioned to keep leads at correct height and prevent hazards.   |
|   |   | 5.3 | Power board visually checked for damage, water entry and stability. Area surrounding board checked for potential hazards. |
|   |   | 5.4 | Leads checked for tags and visual damage. Earth leakage protection checked for serviceability.                            |
|   |   | 5.5 | Work safely performed using electrical power supply.  |



6	Adhere to emergency procedures	6.1	Emergency equipment able to be located and used as required.
		6.2	Current work site emergency/evacuation procedures adhered to.
7	Carry out general housekeeping	7.1	Waste material disposed of safely in accordance with requirements of site and regulatory legislation.
		7.2	Unused equipment and materials safely and correctly cleaned, maintained and stored.
		7.3	Requirements of site, regulatory bodies and Occupational Health and Safety requirements observed.

## RANGE STATEMENT

Quality Assurance requirements may include:

- working environment
- adverse weather conditions
- protection of work personnel
- protection of public

Personal protective equipment may include but is not limited to:

- overalls, safety glasses/goggles, hard hat cap
- dust masks/respirator, safety boots
- ear plugs/muffs
- gloves

Regulatory legislation may include:

- OH&S, Dangerous goods

Manual handling techniques used in accordance with current Occupational Health and Safety.

Emergency equipment and procedures include:

- fire fighting
- medical and first aid
- evacuation

Ladders and work platforms include:

- extension ladders
- step ladders
- trestle ladders
- simple work platforms

Power connections include:

- isolation transformer
- power pole
- switch board area

Safety responsibilities apply to:

- personal protection
- safe interactive work practices (duty of care)
- protection of public and environment

Reporting of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by safely and effectively carrying out safe work practices within the range of variables statement relevant to the work orientation.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- demonstrate application of organisational policies and procedures including Quality Assurance requirements where applicable
- carry out correct procedures prior to and during construction process
- safe and effective operational use of tools, plant and equipment
- carry out appropriate applications in accordance with regulatory and legislative requirements

### (2) Pre-requisite Relationship of Units

- Nil

### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- workplace and equipment safety requirements
- materials
- Factory's Act
- other relevant acts, regulations and codes of practice
- company policy

#### Skills

The ability to:

- work safely to instructions
- use power and hand tools
- select material to requirements
- communicate effectively
- handle material

### (4) Resource Implications

The following resources should be made available:

- Suitable work area appropriate to the construction process
- Appropriate equipment, materials and documentation to comply with OH&S legislation and/or company policies
- Hand and power tools, plant and equipment appropriate to the construction process

**(5) Method of Assessment**

Competency shall be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based upon integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGCOR0021A: Plan and organise work**

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively plan and organise work assignments, and applies to all individuals working in the construction industry.

Construction Field:

General Construction

**ELEMENT OF  
COMPETENCY****PERFORMANCE CRITERIA**

1	Identify work requirements	1.1	Instructions for work schedule and performance and quality assurance requirements received, understood and clarified where necessary.
2	Plan process to complete work	2.1	Work identified, prioritised and sequenced to achieve effective completion of work. Major construction process/sequence identified.
3	Select tools, equipment and materials	3.1	Personal protective equipment correctly identified and selected to suit job requirements.
		3.2	Tools, equipment and materials selected to suit job requirements.
		3.3	Key functions of major construction plant and equipment identified.
4	Demonstrate safe and efficient sequence of work	4.1	Work performed safely and in a logical and efficient sequence.
		4.2	Worksite kept clean and clear of debris.
		4.3	Tools and equipment safely located when not in immediate use.
5	Modify plan	5.1	Workplace modified to overcome unforeseen developments that occur as work progresses.
		5.2	Modifications to work plan, based on experience, are identified and incorporated into successive work activities.
6	Report outcomes	6.1	Verbal report provided on completed activities.

- |   |          |     |  |
|---|----------|-----|--|
| 7 | Clean up | 7.1 | Unused materials safely stacked for removal.         |
|   |          | 7.2 | Debris and waste material removed from job location. |
|   |          | 7.3 | Worksite left clean, safe and secure on completion.  |
|   |          | 7.4 | Tools and equipment cleaned, maintained and stored.  |

### **RANGE STATEMENT**

Work organisation sequence may range from receiving instructions, to carrying out task, to cleaning up task.

Work plan may be either written or verbal and may include the following:

- preparation of work area
- selections of tools, equipment and materials
- handling of materials, tools and equipment
- housekeeping requirements

Work schedule may be carried out in a singular application or in a team situation.

Work schedule and performance may have to adhere to Quality Assurance policy and procedures.

### **EVIDENCE GUIDE**

Competency is to be demonstrated by safe and effective preparation using any of the range of work sequences listed within the range of variables statement relative to the work environment.

#### **(1) Critical Aspects and Evidence**

It is essential that competence is observed in the following aspects:

- indicate compliance with Occupational Health and Safety regulations applicable to workplace operations including relevant statutory regulations and legislation
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during the application of construction process
- communicate to enable efficient individual/organisational planning of work

#### **(2) Pre-requisite Relationship of Units**

- Nil

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- portable power tools
- hand tools and equipment
- materials appropriate to the task
- materials handling
- quality Assurance

Skills

The ability to:

- work safely to instructions
- use power tools and hand tools
- handle material
- select material
- apply Quality Assurance

**(4) Resource Implications**

The following resources should be made available:

- general construction materials appropriate to the particular construction process
- hand and power tools appropriate to the construction process
- suitable work area appropriate to the construction process

**(5) Method of Assessment**

Competency should be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based upon integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
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Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## BCGCOR0031A: Draw and interpret simple drawings

### Competency Descriptor:

This unit deals with the skills and knowledge required to effectively draw and interpret simple layout drawings and sketches, and applies to individuals working in the construction industry.

### Competency Field:

General Construction

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1	Prepare for drawing	1.1	Drawing instruments and supplies are correctly identified and selected.
		1.2	Alphabet of lines is identified and applied with all lines distinct, easily read and of the appropriate line weight and type.
		1.3	Measurements are performed using appropriate scales.
		1.4	Lettering is constructed distinctly and is easily read.
2	Draw geometric constructions	2.1	The completed drawing illustrates a series of geometric shapes and activities.
		2.2	The finished drawing is neat and clear of smudges.
3	Construct multi-view (orthographic 2-D) drawing	3.1	The drawing illustrates three views of specified object with correct line representation.
		3.2	The finished multi-view drawing is constructed correctly.
4.	Develop a pictorial (3D) drawing	4.1	The drawing has a correct view orientation (isometric).
		4.2	The complete pictorial (3D) drawing is correctly developed with hidden features.
5	Construct and dimension drawings	5.1	All major features on the drawing are appropriately dimensioned to correct specification.
		5.2	All necessary details and information are shown.
6	Apply notes and leaders	6.1	The finished drawing is neatly and appropriately labelled.



		6.2	Completed drawing illustrates correct application of notes and leaders.
7	Prepare freehand sketch	7.1	Sketch correctly drawn with appropriate views where applicable.
		7.2	Necessary dimensions are shown and instructions and/or information conveyed by appropriate use of notes.
8	Interpret details from sketches and drawings	8.1	Components, assemblies or objects correctly identified.
		8.2	Commonly used symbols and abbreviations are recognised.
		8.3	Dimensions and instructions are identified and followed as required.
		8.4	Material requirements are correctly identified as required.

## RANGE STATEMENTS

This unit applies to the preparation and interpretation of simple working drawings and sketches of building components or structures

Drawing instruments and supplies:

- drafting kit
- CAD workstation
- drafting paper
- drawings/modules/photographs

Alphabet of line:

- object line
- hidden line
- centre line
- section line
- dimension
- extension line
- cutting line
- short break line
- phantom line

Measurement systems:

- metres/centimetres
- metric(SI) system

Types of scale:

- architectural
- metric
- engineering
- civil

Geometric construction to include:

- circles
- regular polygons with four, six and eight sides
- pentagon inscribed within measured circle
- ellipse
- triangles with specified angles
- arcs thru three points; tangent to two circles

Multi-view (orthographic 2-D) drawings:

- full scale (1:1) orthographic 3-view drawing using third angle projection with top, front and right side view – show all hidden features and centrelines

Pictorial (3-D) drawing to include:

- isometric corner with left and right side lines each 30 degrees up from horizontal and third line at a vertical, with all three lines joining in a common intersection
- full scale (1:1) basic isometric drawing

Dimension drawings:

- dimensioning styles and methods: coordinate, linear/datum
- dimensioning 2-D drawing
- dimensioning complex shapes: spheres, cylinders, tapers, pyramids

## EVIDENCE GUIDE

Competency is to be demonstrated by developing and effectively reading and interpreting simple drawings and sketches to locate or identify specified features or specifications in accordance with the performance criteria and the range listed within the range statement.

### (1) Critical Aspects and Evidence

It is essential that competence is observed in the following aspects:

- identify and understand various types of drawings
- identify alphabet of lines, scales, lettering, dimensions, symbols, abbreviations and key features
- identify title panel and reference date of drawings

### (2) Pre-requisite Relationship of Units

- Nil

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- types and use of drawing instruments and supplies
- identification of alphabet of lines, line type variation, order of usage and application on drawings
- types of scale and proportion and how they are used for measurement
- symbols, dimensions and terminology
- types of drawings and their applications

Skills

The ability to:

- make simple freehand sketches
- prepare technical drawings with drawing instruments and with Auto CAD
- read and interpret sketches and working drawings
- measure accurately
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- drawing instruments/CAD
- drawing supplies
- objects for drawing

**(5) Method of Assessment**

Competency may be assessed in a training institution under direct supervision with regular checks by the instructor.

Competency in this unit would be determined by an individual working alone or based upon integrated project work.

Assessment would be continuous by checking at the various stages of the job application in accordance with the performance criteria.

The candidate will have access to drawing instrument, equipment, materials and documentation required

**(6) Context of Assessment**

Competency should be assessed in a classroom environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## BCGCOR0041A: Carry out measurements and calculations

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively carry out measurements and calculation of work to required tolerance, and applies to individuals working in the construction industry.

Competency Field:

General Construction

### ELEMENT OF COMPETENCY

### PERFORMANCE CRITERIA

1. Obtain measurements	1.1	Accurate measurements obtained to job instruction using rule, tape and/or square.
	1.2	Quality Assurance requirements associated with company's construction operations recognised and adhered to.
2. Perform simple calculations	2.1	Simple calculations involving length, perimeter, mass and volume using four basic operations (+, -, x, /), are carried out.
	3.1	Measurements or quantities estimated (approximately) on site or from job instruction.
3. Estimate approximate quantities	3.2	Information obtained correctly from job instruction.
	3.3	Measurements correctly identified/recorded without error.
	3.4	Quantities of materials suitable for work undertaken are calculated and recorded to job instructions.
	3.5	Costs for a simple project estimated to be within + or - 10%.

### RANGE STATEMENT

This unit applies to simple projects applicable to:

- timber frames
- structural steelwork
- concrete
- brick/block work
- joinery
- tiling
- sheeting/panelling
- plastering
- final finishes
- fences
- formwork
- excavation work

Materials include all materials utilised in construction of commercial, industrial/domestic and civil construction projects, including hardware items.

Calculations to include:

- area
- perimeter
- volume
- mass
- scales
- ratios (ingredients/elements and triangulation)
- proportion

Job instruction may involve:

- verbal direction/instruction
- written instruction
- provision of job drawing and details

## EVIDENCE GUIDE

Competency is to be demonstrated by the effective calculation of measurements and calculations of materials in accordance with the range listed in the range statement, relevant to the work orientation.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- communicate effectively to enable accurate calculations and measurements
- demonstrate effective use of measuring devices
- accurate measurements taken and recorded
- perform simple calculations to specifications
- estimate quantities and costs to requirements

### (2) Pre-requisite Relationship of Units

- Nil

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- drawings and specifications
- materials relevant to the construction process
- basic operations in simple geometry, measurement and calculations
- costing relative to the construction process

Skills

The ability to:

- read and interpret drawings
- measure and calculate manually
- record measurements
- operate electronic calculating devices
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- information on construction materials appropriate to the relevant construction process
- suitable work area appropriate to the activity
- suitable site plans/drawings and/or specifications
- measuring and calculating devices

**(5) Method of Assessment**

Competency should be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based upon integrated project work.

Assessment may be intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.



**BCGCOR0051A: Use hand and power tools**

Competency Descriptor:

This unit deals with skills and knowledge required to competently select and use appropriate hand and power tools of construction trades, and applies to individuals in the construction industry.

Competency Field:

General Construction

<b>ELEMENT OF COMPETENCY</b>		<b>PERFORMANCE CRITERIA</b>	
1	Identify hand and power tools	1.1	Regular power tool applications in workshop operations recognised.
		1.2	Types of hand and power tools and their functions identified.
		1.3	Sources of power supply recognised.
2	Select hand tools	2.1	OH&S requirements for using hand tools recognised and adhered to.
		2.2	Appropriate personal protective equipment selected, correctly fitted and used.
		2.3	Hand tools selected consistent with needs of job.
		2.4	Tools checked for serviceability and safety and any faults reported to supervisor.
		2.5	Equipment selected to hold or support material for power tools application where applicable.
3	Use hand tools	3.1	Material located and held in position for hand tool application.
		3.2	Hand tools safely and effectively used according to their intended use.
		3.3	Hand tools safely located when not in immediate use.
4	Select power tools	4.1	Occupational Health and Safety (OH&S) requirements for using power tools recognised and adhered to.
		4.2	Appropriate personal protective equipment selected, correctly fitted and used.

- 4.3 Power tools and leads/hoses selected consistent with needs of job in accordance with conventional work practice.
  - 4.4 Power tools and leads/hoses visually checked for serviceability/safety in accordance with OH&S requirements and any faults reported to supervisor.
  - 4.5 Equipment selected to hold or support materials for power tool application where applicable.
- 5 Establish power supply to work location
  - 5.1 Route identified for safe placement of leads/hoses clear of hazards.
  - 5.2 Electric power leads run out to power supply and supported overhead clear of traffic or covered if presenting possible trip hazard.
  - 5.3 Electric power leads connected to supply and power board or direct to power tool.
  - 5.4 Air hoses run out to compressed air supply and covered if presenting possible trip hazard.
  - 5.5 Hose connected to power tool and air supply.
- 6 Use power tools
  - 6.1 Material located and held in position for power tool application where applicable.
  - 6.2 Power tools safely and effectively used in application processes.
  - 6.3 Power tools safely located when not in use.
- 7 Clean up
  - 7.1 Power tools cleaned, maintained and stored.
  - 7.2 Power leads/hoses cleaned, visually checked and stored.
  - 7.3 Equipment cleaned, maintained and stored.
  - 7.4 Work area cleared and waste removed.

## RANGE STATEMENT

Hand tools include, but are not limited to:

- adjustable spanners
- bars (crow and pinch)
- bolt cutters
- brooms
- chisels
- hacksaws
- handsaws
- hammers
- measuring tapes
- nips
- picks/mattocks
- pliers
- sealant gun
- shovel/spades
- sledge hammers
- spanners and wrenches
- spirit level, straight edge
- string lines
- trowels and floats
- wire cutters
- paint brushes/rollers
- spatula/putty knives

Power supply to include but not limited to:

- electricity
- compressed air

Power tools include:

- drills
- nail guns
- staplers
- screwdrivers
- sanders
- angle grinders
- pneumatic wrenches
- circular saw
- jig saws
- planers
- routers

Personal protective equipment may include:

- overalls
- boots
- hard hat/cap
- safety glasses/goggles
- gloves
- ear plugs/muffs
- face masks/respirators

OH&S requirements may include:

- workshop/worksite safe working practices
- use of tools and equipment
- use of power tools
- safe handling and storage of materials

Reporting of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by the safe and effective operation of particular power and hand tools listed within the range of variables statement relevant to the work orientation.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- adopt and carry out correct procedures prior to and during use of hand tools and power tools
- demonstrate safe and effective operational use of tools and equipment
- interactively communicate with others to ensure safe and effective operations

### (2) Pre-requisite Relationship of Units

Competency in this unit may be determined concurrently based upon integrated project work using the following units:

- |                           |   |
|---------------------------|---|
| • BCGCOR0011A             | Carry out OH&S requirements   |
| • BCGCOR0061A             | Use plant and equipment   |
| • BCGCOR0041A             | Carry out measurements and calculations                             |
| • BCGCOR0111A             | Handle construction materials and safe disposal of waste            |
| • BCGMAS0121A-BCGPAD0191A | Prepare for the construction process (relative to work orientation) |

### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- workplace and equipment safety requirements and OH&S legislation
- portable power tools
- hand tools and equipment
- materials
- materials handling whilst operating tools

#### Skills

The ability to:

- work safely to instructions
- apply appropriate hand-eye co-ordination in the use of tools
- handle/hold materials during operation of tools
- select appropriate tools for material usage
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- general construction materials
- hand and power tools appropriate to the construction process
- plant and equipment appropriate to the construction process
- suitable work area appropriate to the construction process
- appropriate OH&S safety resources

**(5) Method of Assessment**

Competency shall be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures .

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>• Carries out established processes</li> <li>• Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Manages process</li> <li>• Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes principles and procedures</li> <li>• Evaluates and reshapes process</li> <li>• Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGCOR0061A: Use small plant and equipment**

## Competency Descriptor:

This unit deals with the skills and knowledge required to safely and efficiently operate small construction plant and equipment, and applies to individuals working with ancillary equipment operation/masonry in the construction industry.

## Competency Field:

General Construction

ELEMENT OF COMPETENCY	PERFORMANCE CRITERIA
1. Identify plant and equipment, their operations and safety requirements	1.1 Types and function of plant/equipment used in construction process identified. 1.2 Method of operation of plant/equipment identified and understood, relative to manufacturer's recommendations. 1.3 Occupational Health and Safety (OH&S) requirements for guarding and cut off switches identified. 1.4 OH&S requirements for personal protective equipment associated with using machines identified.
2. Select plant and equipment	2.1 OH&S requirements for operating and using plant and equipment recognised and adhered to. 2.2 Appropriate personal protective equipment selected, correctly fitted and used. 2.3 Plant and equipment selected consistent with needs of job. 2.4 Plant and equipment checked for serviceability/safety and faults reported to supervisor.
3. Use plant and equipment	3.1 Plant and equipment safely and effectively used. 3.2 Site hazards identified in use of plant and equipment and correct procedures used to eliminate or minimise risk. 3.3 Plant and equipment safely located when not in immediate use.

## 4. Clean up

## 4.1 Plant and equipment cleaned, maintained and stored.

**RANGE STATEMENT**

This unit applies to all small plant and equipment used in construction work

Plant and equipment includes but is not limited to:

- air compressor and hoses
- concrete mixer
- industrial wet and dry vacuum cleaner
- pallet trolley
- rollers
- compactors
- pumps and hoses
- brick/masonry saw
- terrazzo grinders
- ladders
- trestles and planks
- wheelbarrows

Personal protective equipment may include:

- overalls
- boots
- hard hat/cap
- safety glasses/goggles
- gloves
- ear plugs/muffs
- face masks/respirators

OH&S requirements are to be in accordance with relevant Statutory regulations, which may include:

- workshop/worksite safety practices
- control of noise and dust
- use of ladders and working platforms
- control of exhaust emission
- isolation of work areas

Reporting of faults may be written or verbal.

**EVIDENCE GUIDE**

Competency is to be demonstrated by the safe and effective operation of particular plant and equipment listed within the range of variable s statement relevant to the work orientation.



**(1) Critical Aspects of Evidence**

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during application of processes
- demonstrate safe and effective operational use of tools, plant and equipment
- demonstrate and show understanding of manufacturer's specifications and recommendations
- interactively communicate with others to ensure safe and effective workplace operations

**(2) Pre-Requisite Relationship of Units**

- Nil

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- portable power tools applicable to the construction process
- hand tools and a range of plant and equipment
- materials handling relevant to plant and equipment use
- workplace communication processes

Skills

The ability to:

- work safely to instructions
- use power tools, hand tools, plant and equipment applicable to the construction process
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- hand and power tools appropriate to the construction process
- plant and equipment appropriate to the construction process
- suitable work area appropriate to the construction process
- appropriate OH&S safety resources

**(5) Method of Assessment**

Competency should be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based on integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## **BCGCOR0071A: Erect and dismantle restricted height scaffolding**

### Competency Descriptor:

This unit deals with the skills and knowledge required to effectively and safely erect and dismantle scaffolding at specified height (not exceeding 4 meters), and applies to individuals working at elevated positions in the building and construction industry.

### Competency Field:

General construction

<b>ELEMENT OF COMPETENCY</b>		<b>PERFORMANCE CRITERIA</b>	
1.	Plan and prepare work	1.1	Occupational Health and Safety (OH&S) requirements for tasks and workplace environment recognised and adhered to.
		1.2	Location and scope of scaffolding/equipment determined from job drawings or supervisor's instructions.
		1.3	Appropriate personal protective equipment selected, correctly fitted and used.
		1.4	Tools and equipment selected consistent with job requirements, checked for serviceability and any faults reported to supervisor.
		1.5	Scaffolding/equipment components selected consistent with requirements of job.
2.	Erect safety barriers	2.1	Safety barriers erected, where applicable, to isolate site work area.
		2.2	Relevant signage installed where required to OH&S requirements.
3.	Erect scaffolding	3.1	All work undertaken safely and to supervisor's prescribed procedures.
		3.2	Erection site prepared to meet job requirements.
		3.3	Necessary signage prepared to meet job requirements.
		3.4	Scaffolding/equipment erected to plan in accordance with safe work practices, OH&S and manufacturers requirements.

4.	Dismantle scaffolding	4.1	Work undertaken safely and according to reverse procedures for erecting.
		4.2	Scaffolding/equipment dismantled in accordance with site procedures and critical structural safety requirements.
5.	Clean up	5.1	Site cleaned and cleared of all tools, excess material and waste and left in safe condition.
		5.2	Tools and equipment cleaned, maintained and stored.

## RANGE STATEMENT

This unit applies to the erection of scaffolding up to 4m in height, which must be constructed in accordance with:

- Guidelines for Scaffolding, and
- General requirements for erecting scaffolding

Personal protective equipment may include:

- overalls
- jacket
- boots
- hard hat
- safety glasses
- gloves
- ear plugs/muffs
- dust masks

The range of scaffolding equipment associated with this unit includes:

- standing prefabricated tower scaffolds
- tube and fitting scaffolds to 4 metres height
- fall protection devices
- catch platforms
- bracket scaffolds

Tools and equipment may include:

- spanners
- shovels
- hammers
- picks
- crow bars
- ladders

Work is to be undertaken in accordance with statutory regulatory and legislative requirements for Occupational Health and Safety. Work must be supervised and undertaken in a team situation.

Supervision instruction may involve:

- verbal direction/instruction
- written instruction
- provision of sketch/drawing and details

Reports of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by the safe and effective erection and dismantling of different types of restricted height scaffolding listed within the range of variables statement relevant to the work orientation.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during application of construction process
- demonstrate safe and effective operational use of scaffolding tools and equipment
- erect scaffolding plumb and brace for stability
- interactively communicate with others to ensure safe and effective erection and dismantling operations

### (2) Pre-requisite Relationship of Units

- BCGCOR0011A      Carry out OH&S requirements
- BCGCOR0051A      Use hand and power tools

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- scaffolding and basic working platforms
- hand tools
- materials
- materials handling
- vertical and horizontal triangular concepts

Skills

The ability to:

- work safely to instructions
- use hand tools
- handle material
- select material
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- construction materials appropriate for scaffolding
- hand tools and equipment appropriate to the construction process
- suitable work area appropriate to the construction process
- information on OH&S requirements

**(5) Method of Assessment**

Competency shall be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based on integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of the process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpins effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills .

**BCGCOR0081A: Use simple levelling devices**

Competency Descriptor:

This unit deals with the skills and knowledge required to competently select and use levelling devices, and applies to individuals working in the building and Construction industry.

Competency Field:

General Construction

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1	Plan and prepare work	1.1	Occupational Health and Safety (OH&S) requirements recognised and adhered to in accordance with application tasks and workplace environment.
		1.2	Requirements of job identified from drawings or instructions.
		1.3	Appropriate personal protective equipment selected, correctly fitted and used.
		1.4	Tools and equipment selected consistent with job requirements, checked for serviceability and any faults reported to supervisor.
		1.5	Quality Assurance requirements recognised and adhered to in accordance with company's construction operations.
2	Set up and use levelling device	2.1	Heights to be transferred identified from given instructions or drawings.
		2.2	Device assembled and filled with water to required level with air bubbles removed.
		2.3	Height transferred to required locations to a tolerance of + or - 5mm over 3 metres.
3	Transfer heights with straight edge and spirit level	3.1	Heights to be transferred identified from given instructions/drawings or given marked level.
		3.2	Height transferred to required location to + or - 5mm over 3 metres.
4	Maintain given level or specified slope with boning rods	4.1	Heights of each end of line to be boned established to given levels.



	4.2	End of boning rods securely fixed to required heights.
	4.3	Heights of intermediate points sighted and marked with boning rods to a tolerance of + 10mm.
5	Clean-up	5.1 Tools and equipment cleaned, maintained and stored.

## RANGE STATEMENT

This unit applies to using simple levelling devices to carry out basic exercises in transferring levels and/or maintaining a line of a slope.

Levelling and lining devices include:

- water level
- spirit level
- boning rods
- line level

Heights or levels may be given by:

- drawing/sketch indicating mark
- verbal or written instruction indicating level or mark
- datum/survey peg fixed into ground
- chalk or nail mark on paved/concrete surface
- mark on vertical surface

Associated tools and equipment include:

- string line
- wooden/steel pegs
- straight edge
- hammer
- chalk line

Personal protective equipment may include:

- overalls
- boots
- hard hat/cap
- safety glasses
- dust jacket
- masks/respirators

Work may be carried out under supervision and in a team situation or individually.

Reporting of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by carrying out the effective application of the different types of levelling devices listed within the range statement relative to the work orientation.

**(1) Critical Aspects of Evidence**

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during application of levelling and boning processes
- demonstrate safe and effective handling and operational use of levelling device
- indicate care in accurately transferring levels to other locations
- interactive communication with others to ensure safe and effective levelling operations.

**(2) Pre-requisite Relationship of Units**

- Nil

**(3) Underpinning Knowledge and Skills****Knowledge**

Knowledge of:

- workplace and equipment safety requirements
- hand tools
- measurement and calculation
- Quality Assurance
- range of levelling devices
- horizontal/vertical concepts

**Skills**

The ability to:

- work safely to instructions
- measure accurately
- use hand tools
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- general construction materials appropriate to levelling
- hand tools appropriate to levelling and lining
- equipment appropriate to the activity processes
- suitable work area appropriate to the activities
- suitable plans/drawings and specification

**(5) Method of Assessment**

Competency should be assessed while work is being done, under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit should be determined concurrently, based on integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## ITICOR0011A: Carry out data entry and retrieval procedures

### Competency Descriptor:

This unit deals with the skills and knowledge required to operate computer to enter, manipulate and retrieve data and to access information and communicate via the Internet.

Competency Field: Information Technology and Communications - Operations

### ELEMENT OF COMPETENCY PERFORMANCE CRITERIA

1. Initiate computer system	1.1	Equipment and work environment are correctly checked for readiness to perform scheduled tasks.
	1.2	The hardware components of the computer and their functions are correctly identified.
	1.3	Equipment is powered up correctly.
	1.4	Access codes are correctly applied.
	1.5	Appropriate software is selected or loaded from the menu.
2. Enter data	2.1	Types of data for entry correctly identified and collected.
	2.2	Input devices selected and used are appropriate for the intended operations.
	2.3	Manipulative procedures of Input device conform to established practices.
	2.4	Keyboard/mouse is operated within the designated speed and accuracy requirements.
	2.5	Computer files are correctly located or new files are created, named and saved.
	2.6	Data is accurately entered in the appropriate files using specified procedure and format.
	2.7	Data entered is validated in accordance with specified procedures.
	2.8	Anomalous results are corrected or reported in accordance with specified procedures.
	2.9	Back-up made in accordance with operating procedures.

- 3. Retrieve data
  - 3.1 The identity and source of information is established.
  - 3.2 Authority to access data is obtained where required.
  - 3.3 Files and data are correctly located and accessed.
  - 3.4 Integrity and confidentiality of data are maintained.
  - 3.5 The relevant reports or information retrieved using approved procedure.
  - 3.6 Formats to retrieved report or information conform to that required.
  - 3.7 Copy of the data is printed where required.
- 4. Amend data
  - 4.1 Source of data/information for amendment is established.
  - 4.2 Data to be amended is correctly located within the file.
  - 4.3 The correct data/Information is entered, changed or deleted using appropriate input device and approved procedures.
  - 4.4 The Integrity of data is maintained.
- 5. Use document layout and data format facilities
  - 5.1 Requirements for document are verified where necessary.
  - 5.2 The given format and layout are appropriately applied.
  - 5.3 Facilities to achieve the desired format and layout are correctly identified, accessed and used.
  - 5.4 Data manipulating facilities are used correctly.
  - 5.5 Format reflects accuracy and completeness.
- 6. Monitor the operation of equipment
  - 6.1 The system is monitored to ensure correct operation of tasks.
  - 6.2 Routine system messages are promptly and correctly dealt with.
  - 6.3 Non-routine messages are promptly referred in accordance with operating requirements.

	6.4	Error conditions within level of authority are dealt with promptly, and uncorrected errors are promptly reported.
	6.5	Output devices and materials are monitored for quality.
7. Access and transmit information via the Internet	7.1	Access to the Internet is gained in accordance with the provider's operating procedures.
	7.2	Evidence of the ability to negotiate web sites to locate and access specified information and other services is efficiently demonstrated.
	7.3	E-Mail is sent and retrieved competently.
8. Close down computer system	8.1	The correct shut down sequence is followed.
	8.2	Problem with shutting down computer is reported promptly.
	8.3	All safety and protective procedures are observed.
	8.4	The system integrity and security are preserved.
9. Maintain computer equipment	9.1	Cleaning materials and/or solutions used meet specified recommendation.
	9.2	The equipment is cleaned as directed.
	9.3	Wear and faults identified are promptly reported to the appropriate personnel.

## RANGE STATEMENT

This unit applies to activities associated with essential operations linked to using and maintaining basic computer equipment.

### Equipment:

- install supplied computer
- install supplied peripherals

### Work environment:

- equipment
- furniture
- cabling
- power supply

## Input devices:

- keyboard
- mouse
- scanner
- microphone
- camera

## Software systems to include for:

- word processing
- spread sheet
- internet access

## Files save on:

- network
- magnetic media
- personal PC

## Data:

- textual
- numerical
- graphical

## File operations:

Naming, updating, archiving, traversing field and records in database, use of search, sort, print

## Maintenance:

- cleaning: enclosures, screen, input devices, output devices
- checking cables, etc

## EVIDENCE GUIDE

Competency is to be demonstrated by the ability to accurately carry out basic data entry and retrieval operations on a computer system in accordance with the performance criteria and the range listed within the range of variables statement .

### (1) Critical Aspects and Evidence

It is essential that competence be observed in the following aspects:

- Initiate the use on the equipment.
- Use document layout and data format facilities.
- Locate and access data.
- Use file operations.
- Manipulate input devices.
- Key-in and format reports.
- Access to the internet.

**(2) Pre-requisite Relationship of Units**

The pre-requisite for this unit is:

- Nil

**(3) Underpinning Knowledge and Skills**Knowledge

knowledge of:

- safety for working with and around computers
- computer hardware and software systems
- procedure for initiating and closing down computer
- the operation of the data entry management system
- methods of locating files
- organisation's standards applicable to accessing files
- files operations and their applications
- file operation in database setting
- creating, locating and saving files
- using input devices
- using data checking devices
- formatting functions of software
- layout function of software
- graphic productions and manipulation
- regard for accuracy and security of information
- functions on the internet

Skills

The ability to:

- identify computer hardware
- manipulate data input devices
- access data
- use file operations
- key-in and format reports and letters
- retrieve data
- amend data
- print data
- save data
- search and receive data from the internet
- send and receive E-Mail

**(4) Resource Implications**

Files saved on network, magnetic media, personal Computer

Input devices: Keyboard, mouse, other selection devices



**(5) Method of Assessment**

Competency shall be assessed while work is undertaken under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competencies in this unit may be determined concurrently. Assessment must be in accordance with the performance criteria .

**(6) Context of Assessment**

This unit may be assessed on or off the job. Assessment should include practical demonstration either in the workplace or through a simulation. A range of methods to assess underpinning knowledge should support this

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices .

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level -	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level -	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## **BCGCOR0111A: Handle construction materials and safely dispose of waste**

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively and safely handle construction materials, and to dispose of waste in a safe and environment friendly manner. It applies to individuals working in the construction industry.

Competency Field:

General Construction

<b>ELEMENT OF COMPETENCY</b>		<b>PERFORMANCE CRITERIA</b>	
1	Plan and prepare work	1.1	Occupational Health and Safety (OH&S) requirements associated with application tasks and workplace environment recognised and adhered to.
		1.2	Appropriate personal protective equipment selected, correctly fitted and used.
		1.3	Quality Assurance requirements associated with company's construction operations recognised and adhered to.
		1.4	Tools and equipment for handling materials/goods, non -toxic waste, selected consistent with job requirements, checked for serviceability and any faults reported to supervisor.
2	Correctly manual handle, sort and stack construction material	2.1	Common construction materials recognised and selected for sorting and stacking/stockpiling to supervisor's instructions and/or specifications.
		2.2	Handling characteristics of materials identified and appropriate handling techniques applied.
		2.3	Specific handling requirements for hazardous materials applied.
		2.4	Materials stored, stacked/stockpiled and protected, clear of traffic ways, so they are easily identified, retrieved and not damaged.
		2.5	Appropriate signage and barricades erected where applicable to isolate stored materials from workplace traffic or access.
		2.6	Correct manual handling techniques used.

3	Prepare for mechanical handling of materials	3.1	Materials stacked/banded for mechanical handling in accordance with type of material and plant/equipment to be used.
		3.2	Dogman/rigger assisted with loading, unloading, moving, locating and/or installing materials.
		3.3	Materials safely handled with assistance of pallet trolley, forklift or hoist.
4	Handle and remove waste safely	4.1	Waste materials handled correctly and safely according to MSDS and requirements of regulatory authorities.
		4.2	Hazardous material identified for separate handling.
		4.3	Non-toxic materials removed using correct procedures.
		4.4	Dust suppression procedures used to minimise health risk to work personnel and others.
5	Clean up	5.1	Tools and equipment cleaned, maintained, and stored.
		5.2	Unused materials safely stacked/stockpiled stored.
		5.3	Waste materials disposed of safely.
		5.4	Site cleaned and cleared of debris and unwanted material.

## RANGE STATEMENT

Tools and equipment includes but is not limited to:

- brooms
- hoses
- shovels
- rakes
- wet and dry industrial vacuum cleaners
- wheelbarrows
- pallet trolley
- materials hoists
- forklifts

Construction materials include but are not limited to:

- bricks and concrete masonry
- mortar components – cement, coarse aggregate, sand
- timber
- structural steel sections/components
- concrete
- scaffolding components, pipe sections
- plywood and particle board
- metal sheeting
- steel reinforcement
- insulation
- glass
- paints and sealants
- plaster sheeting

Protection of stacked/stored materials may include:

- covering
- tying or banding
- barricades
- signs
- locked away (hazardous materials)

Dust suppression procedures may include:

- spraying with water
- covering
- use of vacuum cleaner

Waste material and debris include but are not limited to:

- banding straps
- packing pieces
- broken or damaged goods
- cardboard
- plastic
- paper
- loose material

Removal of materials to include processes of recycling and salvage where applicable.

OH&S requirements to be in accordance with (Statutory/Territory) legislation and regulations.

Work to be undertaken as part of a team or individually under supervision of appropriately certificated persons where applicable.

Reporting of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by the effective handling and storing/stacking of appropriate construction materials listed within the range of variables statement, relevant to the work orientation.

### (1) Critical Aspects and Evidence

It is essential that competence is observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations and State/Territory legislation applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during application of materials handling processes
- demonstrate safe and effective operational use of tools and equipment
- demonstrate safe application in the process of cleaning up
- interactively communicate with others to ensure safe and effective operations

**(2) Pre-requisite Relationship of Units**

- Nil

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements including relevant codes and regulation
- hand tools and equipment
- materials
- materials handling
- Quality Assurance
- range of communication mediums (verbal and non-verbal)

Skills

The ability to:

- work safely to instructions
- use hand tools
- handle materials
- select material
- measure
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- general construction materials relative to construction processes
- plant and equipment appropriate to handling processes
- hand tools appropriate to handling processes
- suitable work area appropriate to construction process
- MSDS information

**(5) Method of Assessment**

Competency shall be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based on integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each process.

**(6) Context of Assessment**

Competency shall be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## BCGPAD0191A: Prepare for painting and decorating

Competency Descriptor:

This unit deals with the skills and knowledge required for effectively carrying out construction activities in preparation for painting and decoration process, and applies to individuals working in painting and decorating trades in the building and construction industry.

Competency Field:

General Construction

### ELEMENT OF COMPETENCY PERFORMANCE CRITERIA

1	Plan for construction process	1.1	Quality Assurance requirements of company's painting and decorating operations recognised and adhered to.
		1.2	Preparation and planning requirements identified from drawings and/or plans.
		1.3	Occupational Health and Safety (OH&S) requirements determined and adhered to in accordance with application tasks and workplace environment.
		1.4	Safety hazards identified and correct procedures adopted to minimise risk to self and others.
		1.5	Materials selected according to supervisor's instructions, safely handled and stored/located and ready for application.
		1.6	Appropriate personal protective equipment selected, correctly fitted and used.
		1.7	Tools and equipment selected consistent with job requirements, checked for serviceability and any faults reported to supervisor.
		1.8	Fixing/fasteners selected consistent with job requirements and checked for serviceability.
2	Prepare materials selected for construction process	2.1	Activities for material preparation identified from specifications or supervisor's instructions.
		2.2	Fasteners/fixing prepared for installation to instruction.
		2.3	Material preparation carried out to satisfy requirements of construction process.

- 
- |   |   |     |   |
|---|---|-----|---|
| 3 | Prepare work area suitable for construction process                     | 3.1 | Activities to be carried out in work area identified from surfaces to be finished and height to be accessed.          |
|   |   | 3.2 | Work area prepared for construction process to supervisors instructions.  |
| 4 | Use tools, plant and equipment appropriate for construction process     | 4.1 | Regular hand and power tools suitable for application process identified with job requirements.                       |
|   |   | 4.2 | Hand and power tools used safely and effectively to carry out processes.  |
| 5 | Assist with initial preparation of surfaces for painting and decorating | 5.1 | Sound surfaces prepared by either sanding or washing down using solvents or detergent.                                |
|   |   | 5.2 | Unsound surfaces prepared by scraping and/or sanding  |
| 6 | Assist with preparing surfaces for final finish                         | 6.1 | Stopping/filling material applied to a flush and even finish.   |
|   |   | 6.2 | Surface sanded by hand.   |
|   |   | 6.3 | Primer/sealer/undercoats applied to surface by brush and/or roller.   |
| 7 | Clean up  | 7.1 | Materials stacked /stored for re-use or disposal.   |
|   |   | 7.2 | Work area cleared.  |
|   |   | 7.3 | Tools and equipment cleaned and stored in a cool place.   |
|   |   | 7.4 | Waste disposed of using appropriate method according to National Environmental Protection Agency (NEPA) requirements. |
-



## RANGE STATEMENT

This unit applies to the work undertaken in a team environment for the preparation and subsequent coating of general building surfaces.

Construction process includes:

- worksite preparation
- surface preparation
- application of prime and intermediate coatings

Tools and equipment may include but not limited to:

- |                      |                                |
|----------------------|--------------------------------|
| • scrapers           | • paint pans/buckets           |
| • filling            | • brush-ware accessories       |
| • knives/blades      | • roller frames                |
| • putty knives       | • covers                       |
| • duster brushes     | • roller accessories           |
| • hand sanders       | • ladders                      |
| • mechanical sanders | • trestles                     |
| • paint stirrers     | • planks                       |
| • drop sheets        | • hop-ups                      |
| • wire brushes       | • aluminium mobile scaffolding |
| • hammer             |                                |
| • nail punches       |                                |

Materials may include:

- preparatory products
- paints – solvent-borne (alkyd, urethane, urethane/alkyd, urethane oil or modified alkyd resins) and latex (PVA, PVA/acrylic, acrylic and styrene acrylic)

Surfaces to be painted may include common profiles encompassing:

- |  |                                      |
|--|--------------------------------------|
| • ply  | • in-situ-concrete                   |
| • building boards (including MDF and particle board) | • cement render                      |
| • fibre cement products, iron and steel              | • set plaster                        |
| • zinc coated and zinc alloy coated steel products   | • plaster glass products             |
| • masonry products                                   | • paper-faced gypsum plaster board   |
| • clay bricks  | • previously coated/treated surfaces |
| • concrete blocks                                    |                                      |

## EVIDENCE GUIDE

Competency is to be demonstrated by the safe and effective preparation of materials using the processes listed within the range of variables statement.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during application of construction process
- use tools, plant and equipment safely and effectively
- Processes comply with preparation of surfaces for final finish – painting and decorating

### (2) Pre-requisite Relationship of Units

- BCG0011A Carry out OH&S requirements
- BCG0051A Use hand and power tools
- BCG0061A Use small plant and equipment

### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- workplace and equipment safety requirements
- portable power tools
- hand tools and equipment
- materials relevant to painting and decorating
- materials handling
- measurement and calculation
- interpreting plans
- fixing and fasteners consistent with painting and decorating requirements
- workplace communication requirements

#### Skills

The ability to:

- work safely to instructions
- use power and hand tools
- handle material
- select material
- communicate effectively
- measure relative to the process

**(4) Resource Implications**

The following resources should be made available:

- general construction materials relevant to painting and decorating
- hand and power tools appropriate to painting and decorating process
- plant and equipment appropriate to painting and decorating process
- suitable work area appropriate to painting and decorating process

**(5) Method of Assessment**

Competency should be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based on integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of the process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGCOR0212A: Prepare surfaces**

## Competency Descriptor:

This unit deals with the skills and knowledge required to effectively prepare the range of surfaces for various finishing applications, and applies to individuals working in the preparatory phase of surface finishing in the construction industry.

## Competency Field:

General Construction

**ELEMENT OF COMPETENCY PERFORMANCE CRITERIA**

- |  |   |
|--|---|
| 1. Plan and prepare work                       | 1.1 Quality Assurance requirements of company's construction operations recognised and adhered to.<br>1.2 Preparation requirements identified from drawings, work area and instructions/specifications extract.<br>1.3 OH&S requirements recognised and adhered to in accordance with the application tasks and workplace environment.<br>1.4 Appropriate personal protective equipment selected, correctly fitted and used.<br>1.5 Tools and equipment selected to carry out processes consistent with requirements of job are checked for serviceability and any faults reported to supervisor.<br>1.6 Safety hazards identified and correct procedures used to minimise risk to self and others in accordance with OH&S workplace operations.<br>1.7 Materials appropriate to job application selected, safely handled and stored/located ready for application. |
| 2. Prepare work area for application processes | 2.1 Hazards and attachments safely removed where applicable or arranged for removal from area.<br>2.2 Work area prepared for application processes in accordance with finishing material and manufacturer's specifications.   |
| 3. Prepare surface by sanding/grinding         | 3.1 Correct abrasive disc/sheet or wheel selected in accordance with surface condition and work to be undertaken and fitted to sander/grinder.  |

- 3.2 Sander/grinder used and applied safely to surface in accordance with manufacturer's specifications and relevant OH&S requirements.
- 3.3 All loose or protruding material removed by sander /grinder and brushing so that surface is prepared to specification.
- 4. Patch holes
  - 4.1 Method of patching hole determined from type of material surface, size of hole, compatibility of materials and planned specified finish.
  - 4.2 Patching materials selected to suit material surface and, where applicable, mixed to requirements of manufacturer's specifications.
  - 4.3 Colour patching materials checked to ensure that colour matches surrounding area, where applicable.
  - 4.4 Material applied to job and material according manufacturer's specifications using appropriate application method.
  - 4.5 Where applicable to type of patching material, patched areas must be sanded to provide flush and flat finish to surface.
  - 4.6 Surface brushed/scraped/washed clean of surplus material in accordance with type of patching material and material surface
  - 4.7 Patched areas sealed by application of prime or sealing coat, where applicable, to suit requirements of specified finishes.
- 5. Stop and fill surface
  - 5.1 Correct stopping material selected for specified surface, where applicable.
  - 5.2 Imperfections prepared and material applied to a flush and even finish, where applicable, to proposed additional surface application processes.
  - 5.3 Excess filler removed without damaging or marking surface.
  - 5.4 Surface fine-sanded and cleaned free of dust, where applicable for proposed applied finishes.

- |    |          |     |   |
|----|----------|-----|---|
| 6. | Clean-up | 6.1 | Area cleaned free of debris.  |
|    |          | 6.2 | Waste and unwanted material disposed of safely using appropriate method according to National Environment Protection Act (NEPA) requirements. |
|    |          | 6.3 | Unused materials stored.  |
|    |          | 6.4 | Tools and equipment cleaned, maintained and stored.   |

## RANGE STATEMENT

This unit applies to the preparation of different material surfaces for the application of applied surface finishes or the abutting or attaching of a construction to that surface.

Surface preparation will vary in accordance with the types of materials to be applied to finish or seal surface and the type of construction, which is to abut or be attached to the surface.

Material surfaces include:

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• timber</li> <li>• plasterboard/plaster-glass</li> <li>• masonry</li> <li>• brick</li> </ul> | <ul style="list-style-type: none"> <li>• metal (ferrous and non-ferrous)</li> <li>• concrete</li> <li>• solid plaster</li> <li>• plastic</li> </ul> |
|--|---|

Surface preparation for application finishes includes the preparation for:

- wall and floor tiling
- terrazzo
- segmental paving
- pre-cast cladding
- waterproofing/damp-roofing
- painting
- solid plastering
- wall papering
- clear timber finishes
- stone veneer
- sheet plastering or lining material

Surface preparation for construction applications of abutting or attaching to surfaces includes the preparation for:

- curtain walling fixing
- brick or block laying
- timber partition walls
- light steel partition walls
- formwork construction
- stair installation
- attachment of steel brackets or fabricated units
- aluminium framework fixing
- roof tiling and slating

Surfaces may be new or established material surfaces including both painted and unpainted surfaces.

Personal protective equipment may include:

- overalls
- waterproof pants and jacket
- boots
- gumboots
- gloves
- hard hat/cap
- safety goggles
- ear plugs/muffs
- dust masks/respirators

Equipment includes but is not limited to:

- electrical leads
- elevated work platforms
- trestles
- planks
- ladders
- buckets
- sanders
- hose and water spray

Work area preparation may include:

- clearing area
- setting up equipment for operation
- erecting scaffolding
- disconnecting and removing attachments from or against walls

Waste and debris may include:

- spilt patching material
- cleared or scraped old paint
- discarded abrasive discs/sheets
- cardboard

Tools include but are not limited to:

- scrapers
- paint brushes
- wire brushes
- brooms
- sponges
- sanding blocks
- shovels
- power sanders
- power grinders
- filling blades
- chisels
- hammers

OH&S requirements to be in accordance with Statutory legislation and regulations and may include:

- workplace environment
- protective clothing and equipment
- working platforms
- use of tools and equipment
- control of hazardous substances
- hazard control

Patching materials include but are not limited to:

- cellulose/plaster proprietary fillers
- plaster
- sand and cement
- cornice adhesive
- putty
- plastic wood
- fibreglass
- caulking compounds
- sheet material

- paper
- dirt and dust
- disused containers



Work is to be undertaken either as part of a team or individually under indirect supervision with instructions being verbal or written as part of supervisor's directions.

Instructions and reporting of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by the safe and effective preparation of at least three separate types of material surfaces from those listed within the range of variables statement relevant to the work orientation.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- show compliance with organisational policies and procedures including Quality Assurance requirements
- adopt and carry out correct procedures prior to and during application of preparation processes
- demonstrate that finished patching of holes is flush and straight with surface within tolerances applicable to work orientation
- demonstrate safe and effective operational use of tools, plant and equipment
- interactively communicate with others to ensure safe and effective workplace operations
- prepare surface to specification or instruction requirements

### (2) Pre-requisite Relationship of Units

Prerequisites for this unit are:

- BCGCOR0011A Carry out OH&S requirements
- BCGCOR0051A Use hand and power tools
- BCGCOR0061A Use small plant and equipment
- BCGCOR0071A Erect and dismantle restricted height scaffolding

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- portable power tools
- hand tools and equipment
- materials relevant to patching and preparation of surfaces
- materials handling
- measurement and calculation
- drawings and written instructions
- workplace communication

Skills

The ability to:

- work safely to instructions
- interpret drawing and instructions
- use power tools and hand tools
- handle material
- select material
- measure relative to the process
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- general construction and patching materials relevant to surface preparation
- hand tools and power tools appropriate to application processes
- plant and equipment appropriate to application processes
- suitable work area appropriate to surface preparation process

**(5) Method of Assessment**

Competency shall be assessed while work is being done under indirect supervision with regular checks, but may include some autonomy when working as part of a team.

Competency should be assessed through direct observation of application to tasks and questioning related to underpinning knowledge.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGPAD0772A:****Apply paint by spray**

## Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and apply paint by spray application, and applies to individuals working in painting and decoration trades in the construction industry.

## Competency Field:

General Construction

<b>ELEMENT OF COMPETENCY</b>		<b>PERFORMANCE CRITERIA</b>	
1.	Plan and prepare work	1.1	Occupational Health & Safety (OH&S) requirements for applying sprayed painted finishes and of workplace environment recognised and adhered to.
		1.2	Quality Assurance requirements of company's painting and decorating operations recognised and adhered to.
		1.3	Materials checked for conformity against specifications and finishes schedule.
		1.4	Appropriate personal protective equipment selected, correctly fitted and used.
		1.5	Tools and equipment selected consistent with job rectified/or requirements, checked for serviceability and any faults reported to appropriate person.
		1.6	Safety hazards identified and correct procedures used to reduce risk to self and others.
2.	Prepare materials, unit and application area	2.1	Area set up for application processes to suit unit or application area.
		2.2	Adequate lightening and ventilation to application area provided.
		2.3	Measures taken to ensure dust free area.
		2.4	Paint mixed and viscosity adjusted to allow for application process.
		2.5	Unit/area prepared, where applicable, by covering, removing and/or masking off to specification areas not to be painted.
		2.6	Erect and dismantle scaffolding, where applicable, to job and OH&S requirements.

- 1.1 Occupational Health & Safety (OH&S) requirements for applying sprayed painted finishes and of workplace environment recognised and adhered to.
- 1.2 Quality Assurance requirements of company's painting and decorating operations recognised and adhered to.
- 1.3 Materials checked for conformity against specifications and finishes schedule.
- 1.4 Appropriate personal protective equipment selected, correctly fitted and used.
- 1.5 Tools and equipment selected consistent with job rectified/or requirements, checked for serviceability and any faults reported to appropriate person.
- 1.6 Safety hazards identified and correct procedures used to reduce risk to self and others.

- 2.1 Area set up for application processes to suit unit or application area.
- 2.2 Adequate lightening and ventilation to application area provided.
- 2.3 Measures taken to ensure dust free area.
- 2.4 Paint mixed and viscosity adjusted to allow for application process.
- 2.5 Unit/area prepared, where applicable, by covering, removing and/or masking off to specification areas not to be painted.
- 2.6 Erect and dismantle scaffolding, where applicable, to job and OH&S requirements.

- 
- |    |                                 |     |  |
|----|---------------------------------|-----|--|
| 3. | Set up and test spray equipment | 3.1 | Compressor or airless spray unit set -up in designated operating location, where applicable.   |
|    |                                 | 3.2 | Correct fluid tip, air cap, hoses, filters and tips selected and fitted.   |
|    |                                 | 3.3 | Fittings checked for secure fitting.   |
|    |                                 | 3.4 | Safety devices checked to ensure operational.  |
|    |                                 | 3.5 | Equipment tested and defects corrected to operational and manufacturer's requirements.   |
| 4. | Apply paint by spray            | 4.1 | Spray gun held at appropriate distance from surface and operated to designed requirement.  |
|    |                                 | 4.2 | Paint applied by spray to surface using correct overlapping technique to achieve an even finish to specification.                          |
|    |                                 | 4.3 | Defects in coating identified and corrective action taken.   |
| 5. | Clean up and store equipment    | 5.1 | Spray equipment dismantled, cleaned and maintained.  |
|    |                                 | 5.2 | Fittings and equipment cleaned with correct solvent or water without damage maintained and stored safely to manufacturer's specifications. |
|    |                                 | 5.3 | Area cleaned and waste disposed of safely.   |
|    |                                 | 5.4 | Unused materials sealed and stored.  |

## **RANGE STATEMENT**

This unit applies to the application of pigmented coatings by spray.

Spray application includes both air atomised-spray applications and airless spray units.

Quality Assurance requirements may include but not limited to:

- quality of materials
- preparation of surfaces
- application techniques
- cleanliness of application areas
- specified finish
- maintenance of equipment as per recommendations

Paint coatings may include:

- Solvent-borne (alkyd, urethane, urethane/alkyd, urethane oil or modified alkyd resins)
- latex (PVA, PVA/acrylic, acrylic and styrene acrylic)
- paving paints
- roofing paints (latex and solvent -borne)
- two-pack epoxy and polyurethane
- chlorinated rubber
- anti graffiti paints

Tools and equipment may include:

- spray guns
- sanders
- air compressor
- hoses, tips, filters and other fittings
- brushes
- vacuum cleaner
- drop sheets
- masking equipment
- diaphragm or piston airless spray unit (electrical/pneumatic/petrol)
- scaffold including planks, trestles, stepladders and aluminium mobile

Occupational Health & Safety requirements may include:

- protective clothing
- protective equipment
- hazardous materials
- workplace conditions and isolating areas
- use of plant and equipment
- emergency procedures

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators including cartridge and supplied-air
- ear muffs/plugs
- caps
- jacket
- overalls

Corrective action to include:

- adjust viscosity
- rectify gun problem
- adjust spray technique

Reporting of faults to be in accordance with organisation's worksite procedures and may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by the performance of applying a painted finish by spray that is free from defects and is of the specified thickness, sheen, opacity and colour.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational quality procedures and processes within the context of applying paint using spray equipment
- select and use of appropriate process, tools and equipment
- inspect fittings and hoses for serviceability prior to connection to pressure lines for spray equipment
- use safe and effective methods for spray application of paint
- clean gun and fittings immediately after task completed
- protect adjoining surfaces by drop-sheets and/or masking
- apply accurate and efficient sealing if masking abutted surfaces
- identify typical faults and problems that occur and necessary action taken to rectify
- prepare surface as per manufacturer's specification in compliance with substrate requirements
- interactively communicate with others to ensure safe and effective work procedures
- calculate quantity of materials

### (2) Pre-requisite Relationship of Units

Pre-requisites to this unit are:

- BCGCOR0061A Use plant and equipment
- BCGCOR0212A Prepare surfaces

This unit may be assessed concurrently with:

- BCGPAD0191A Prepare for painting and decorating
- BCGPAD1323A Prepare surfaces for painting and decorating
- BCGPAD1293A Match specified paint colour
- BCGPAD1303A Apply clear timber finish

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- specifications
- spray equipment
- paint and preparatory materials
- spray application and procedures
- tools and equipment
- hazardous materials
- maintenance of equipment
- measuring, marking and masking

Skills

The ability to:

- work safely
- interpret specifications
- organise work
- measure and mask work
- use spray equipment
- apply paint
- use tools and equipment
- communicate effectively
- clean equipment
- store equipment

**(4) Resource Implications**

The following resources should be provided:

- workplace location
- spray equipment
- spray booth for air-atomised spray application
- tools and equipment
- specifications and appropriate materials for activity

**(5) Method of Assessment**

Competency should be assessed while tasks are undertaken.

Assessment should involve:

- observation of work processes
- questioning related to underpinning knowledge

Assessment may be by intermittent checking at various stages of each task a pplication or at the completion of each task in accordance with the performance criteria.

**(6) Context of Assessment**

Competency should be assessed in the normal or simulated workplace environment.

Assessment should be while tasks are undertaken either i ndividually or as part of a team operation under limited supervision.



## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 3	
Work with others and in team	Level 2	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 3	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGPAD1282A: Apply paint by brush/roller**

## Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and apply paint to surface using brush/roller, and applies to individuals working in painting and surface finishing trades.

## Competency Field:

General Construction, Building Restoration

**ELEMENT OF COMPETENCY PERFORMANCE CRITERIA**

- |    |  |     |  |
|----|--|-----|--|
| 1. | Select and prepare materials and equipment | 1.1 | Quality Assurance requirements of company's painting operations recognised and adhered to.   |
|    |  | 1.2 | Occupational Health & Safety (OH&S) requirements for workplace environment preparing and applying paint by brush and roller are recognised and adhered to. |
|    |  | 1.3 | Materials checked for conformity with specifications.  |
|    |  | 1.4 | Appropriate personal protective equipment selected, correctly fitted and used in accordance with safe working standards.                                   |
|    |  | 1.5 | Tools and equipment selected are consistent with the requirements of job, checked for serviceability and any faults reported and/or rectified.             |
|    |  | 1.6 | Safety hazards identified and correct procedures used to reduce risk to self and others.   |
| 2. | Prepare two-pack material                  | 2.1 | OH&S requirements for preparing and applying two -pack paint material by brush and roller recognised and adhered to.                                       |
|    |  | 2.2 | Each component thoroughly stirred using separate stirring sticks.  |
|    |  | 2.3 | Correct amounts of each material mixed in a third container when required, to manufacturer's specified ratio with drying time recognised.                  |
| 3. | Prepare single pack material               | 3.1 | Material thoroughly stirred or boxed to manufacture recommendation.  |
|    |  | 3.2 | Reducer or water added to adjust viscosity as required.  |

4.	Erect work platform (if required)	4.1	Work platform erected where required to appropriate working height and according to OH&S requirements.
5.	Examine and prepare surface for finishing	5.1	Surface examined and prepared as per manufacturer's specification in compliance with substrate requirements.
6.	Apply paint with brush/roller	6.1	Job location checked to ensure provision of adequate ventilation and precautions taken to prevent fire and/or explosion.
		6.2	Brush, roller or brush/roller combination selected for job as per surface profile, size of area and type of paint and finish specified.
		6.3	Paint applied as per job/architect/paint manufacturer specifications to achieve required level of opacity, finish texture and sheen. - using appropriate technique
7.	Clean-up	7.1	Area cleaned of debris.
		7.2	Waste and unwanted material disposed of safely.
		7.3	Unused materials sealed and stored.
		7.4	Equipment cleaned safely, using the correct solvent in accordance with manufacturer's instructions.
		7.5	Equipment maintained and stored correctly.

## RANGE OF STATEMENT

This unit applies to the application of surface coatings by brush, roller or a combination of brush and roller and should be read in conjunction with National Building Standard for the painting of buildings.

Types of paint include:

- solvent-borne (alkyd, urethane, urethane/alkyd, urethane oil or modified alkyd resins)
- latex (PVA, PVA/acrylic, acrylic and styrene acrylic)
- polyurethane clear/varnish
- paving paints
- roofing paints (latex and solvent -borne)
- bituminous paint

Paint products can be classified as:

- sealers
- primers/wash primers
- sealer/undercoats
- undercoats/intermediate coats
- finish coats
- thinner

- two-pack epoxy and polyurethane
- chlorinated rubber
- water-repellents for timber
- water repellents for concrete or masonry
- anti-graffiti paints
- roofing compound
- wood stains

Surfaces to be painted include:

- all common profiles encompassing the full range of natural timber products
- ply
- building boards (including MDF and particle board)
- fibre cement products
- iron and steel
- zinc coated/galvanised steel
- zinc alloy coated steel products
- aluminium products
- copper and brass
- lead
- masonry products
- clay bricks
- concrete blocks
- in-situ-concrete
- cement render
- set plaster
- plaster glass products
- paper-faced gypsum plaster board
- paintable plastic products
- previously coated/treated surfaces in a sound or unsound condition.

Horizontal or vertical surface application.

Tools and equipment may include but not limited to:

- scrapers
- filling knives/blades
- putty knives
- duster brushes
- hand sanders
- mechanical sanders
- paint stirrers
- drop sheets
- heat and flame paint removal equipment
- wire brushes
- hammer
- nail punches
- paint buckets
- brush-ware and brush-ware accessories
- roller frames
- covers
- buckets
- roller accessories

Work platforms can include:

- ladders
- step ladders
- trestles
- planks
- hop-ups
- aluminium mobile scaffolding
- scissor-lift

OH&S requirements can include:

- those associated with exposure to hazardous materials
- solvents
- lead
- chemicals
- fumes/gases
- asbestos fibres
- confined spaces

OH&S requirements can include:

- manual handling
- falling objects
- electrical
- fire
- equipment and machinery faults
- faults associated with work access platforms
- faults related to poor “house keeping”

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators including cartridge and supplied-air
- ear muffs/plugs
- caps
- jackets
- overalls

## EVIDENCE GUIDE

Competence is to be demonstrated by the application of a range of surface coatings under working conditions and over time including solvent borne, latex and two -pack to a range of surfaces using brushes, rollers and a combination of brush/roller.

**(1) Critical Aspects of Evidence**

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures
- select and use appropriate processes, tools and equipment
- apply organisational quality procedures and process within context of painting
- mix paint thoroughly prior to use
- protect surrounding surfaces by drop sheets or masking or removal of objects
- prepare surface as per manufacturer's specification in compliance with substrate requirements
- check colour and finish against specifications before applying paint
- choose correct paint system in accordance with environment, finish and substrate requirements
- identify faults and problems that occur and necessary action taken to rectify
- calculate quantities of materials

**(2) Pre-requisite Relationship of Units**

Pre-requisite skills:

- BCGCOR0061A Use plant and equipment
- BCGCOR0212A Prepare surfaces

This unit may be assessed concurrently with:

- BCGPAD1322A Prepare surfaces for painting and decorating
- BCGPAD1293A Match specified paint colour
- BCGPAD1302A Apply clear wood finish
- BCGPAD0191A Prepare for painting and decorating

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- specifications
- surface coatings technology including specification of paint systems for interior and exterior painting projects to maximise durability, protection and aesthetic considerations
- compatibility of preparatory materials and various types of paint.
- hazards associated with solvents, chemicals and dust
- tools and equipment
- variances in work carried out within sectors of the painting and decorating industry
  - new building (residential/commercial/high rise) maintenance/renovation/refurbishment
  - shop-fitting
  - restoration
  - conservation
  - industrial/protective coatings
- responsibilities with regard to:
  - heritage listed buildings
  - conservation areas
  - environmental requirements

Skills

The ability to:

- work safely, efficiently and effectively
- organise work
- interpret specifications
- take off dimensions, quantities, types of materials, position of materials and application requirements
- identify and select materials for application
- use tools equipment and materials
- prepare materials
- apply materials
- check finished work
- clean an area and dispose of waste
- store materials/components
- respond to emergency situations
- communicate effectively

**(4) Resource Implications**

- workplace or simulated workplace location.
- tools and equipment appropriate to processes
- paint and material required for activity
- specification for proposed tasks

**(5) Method of Assessment**

Competency should be assessed through direct observation and questions related to underpinning knowledge.

Competency should be assessed under general guidance checking at various stages of the process and at completion of the activity against performance criteria and specifications.

**(6) Context of Assessment**

Competency may be assessed in the workplace or simulated workplace setting.

Assessment should be while tasks are undertaken either individually or as part of a team under limited supervision.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 3	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 3	
Solve problems	Level 1	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.



## BCGPAD1322A: Prepare surfaces for painting and decorating

### Competency Descriptor:

This unit deals with the skills and knowledge required to prepare surface for painting and decorating, and applies to individuals applying paints and other surface coating and decorating materials.

### Competency Field:

General Construction

### ELEMENT OF COMPETENCY PERFORMANCE CRITERIA

1. Select and prepare materials and equipment	1.1	Quality Assurance requirements of company's painting and decorating operations recognised and adhered to.
	1.2	Occupational Health and Safety (OH&S) requirements for preparing new and previously painted surfaces for painting and decorating are recognised and adhered to including lead and asbestos fibres.
	1.3	Materials checked for conformity against specifications.
	1.4	Appropriate personal protective equipment selected, correctly fitted and used in accordance with safe working standards.
	1.5	Tools and equipment selected consistent with job requirements, checked for serviceability and any faults reported and/or rectified.
	1.6	Safety hazards identified and correct procedures used to reduce risk to self and others.
2. Erect work platform	2.1	Work platform erected where required to appropriate working height according to OH&S requirements.
3. Prepare new or un-coated surfaces for painting or clear finish	3.1	Specific substrate properties identified and precautions taken to ensure maximum adhesion of subsequent surface coatings.
	3.2	Surface prepared as per manufacturer's specification in compliance with substrate requirements, hazardous materials warnings and paint systems.
	3.3	Surface imperfections stopped, filled and sanded to a smooth finish ready for painting.

- |  |     |   |
|--|-----|---|
| 4. Prepare previously coated surfaces for painting or clear finish | 4.1 | Surface to be painted identified as either sound or unsound for painting.   |
|  | 4.2 | Where surface deemed to be unsound, removed using the most appropriate method.  |
|  | 4.3 | Where surface is deemed to be sound, prepare surface by most appropriate method.  |
|  | 4.4 | Surface imperfections corrected and cracks, filled and sanded to smooth finish ready for painting.  |
| 5. Prepare surface for wallpaper                                   | 5.1 | Determine condition and texture of surface and its suitability to wallpaper application.  |
|  | 5.2 | Where surface to be wallpapered deemed to be unsound, remove using the most appropriate method.   |
|  | 5.3 | Where surface deemed to be sound, prepare surface by most appropriate method.   |
|  | 5.4 | Surface imperfections corrected and cracks filled and sanded to smooth finish ready for application of wallpaper.                         |
| 6. Remove wallpaper and prepare surface for painting               | 6.1 | Determine type of wallpaper to be removed.  |
|  | 6.2 | Wallpaper removed by dry stripping and/or soaking or by steam stripper observing all Occupational Health & Safety standards requirements. |
|  | 6.3 | Where surface deemed to be sound, prepare surface by most appropriate method.   |
|  | 6.4 | Where surface deemed to be unsound, repair surface by most appropriate method.  |
|  | 6.5 | Surface imperfections stopped, filled and sanded to smooth finish ready for application of paint.   |
| 7. Prepare surface for decorative painted finishes                 | 7.1 | Determine condition of surface and its suitability to decorative finishes.  |
|  | 7.2 | Where surface to be decorated deemed to be unsound, remove by most appropriate method.  |

- |             |     |   |
|-------------|-----|---|
|             | 7.3 | Where surface deemed to be sound, prepare surface by most appropriate method.   |
|             | 7.4 | Surface imperfections corrected, and cracks stopped, filled and sanded to a smooth finish ready for application of specified decorative paint finish. |
| 8. Clean up | 8.1 | Area cleaned.   |
|             | 8.2 | Waste and unwanted material disposed of safely.   |
|             | 8.3 | Unused materials sealed and stored in a cool place.   |
|             | 8.4 | Equipment and machinery maintained and stored correctly.  |

## RANGE OF VARIABLES

This unit applies to the preparation of surfaces for painting and decorating processes. It should be read in conjunction with the relevant requirements for the painting and decorating.

New surfaces to be prepared may include:

- all common profiles encompassing the full range of natural timber products
- ply
- building boards fibre cement products
- iron and steel
- zinc coated steel products
- aluminium products
- copper
- brass
- lead
- masonry products
- clay bricks
- concrete blocks
- in-situ-concrete
- cement render
- set plaster
- plaster glass products
- paper-faced gypsum plaster board
- paintable products
- previously coated/treated surfaces

Horizontal or vertical surface application.

Previously coated surfaces in a sound condition may include:

- Painted surfaces in good condition or surfaces that are covered in a film of grease, dust, mould, mild efflorescence, mild chalking or smoke damaged

Previously coated surfaces in an unsound condition may include:

- Paint films which are blistering, flaking, peeling or cracking

Preparation of previously coated surfaces in a sound condition may include:

- sanding
- washing down using soap
- solvents
- detergent
- use of water blaster

Preparation of previously coated surfaces in an unsound condition may include:

- burning off
- abrasive grit
- water blasting
- grinding
- sanding
- scraping (mechanical or hand)
- chemical stripping

Tools and equipment may include but not limited to:

- scrapers
- filling knives/blades
- putty knives
- duster brushes
- hand sanders
- mechanical sanders
- paint stirrers
- drop sheets
- heat and flame paint removal equipment
- wire brushes
- hammer
- nail punches
- paint pan/buckets
- brush-ware and brush-ware accessories
- roller frames
- covers
- buckets and roller accessories
- water blaster
- spray equipment
- sand blaster

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators including cartridge and supplied-air
- ear muffs/plugs
- caps
- overalls

Work platforms can include:

- ladders
- step ladders
- trestles
- planks
- hop-ups
- aluminium mobile scaffolding
- scissor-lift

Occupational Health & Safety (OH&S) requirements can include:

Those associated with exposure to hazardous materials:

- solvents
- lead
- chemicals
- fumes/gases

- asbestos fibres
- confined spaces
- manual handling
- falling objects
- electrical
- fire
- equipment and machinery faults
- faults associated with work access platforms
- faults related to poor “house-keeping”

## EVIDENCE GUIDE

Competence is to be demonstrated by the safe and effective preparation of a range of sound and unsound surfaces for painting and decorating processes.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures
- select and use appropriate processes, tools and equipment
- apply organisational quality procedures and process within context surface preparation for painting and decorating processes
- identify requirements for surface preparation for specific examples in sound, unsound and wallpaper
- choose correct method of surface preparation in accordance with environmental, finish and substrate requirements
- remove corrosion by hand or mechanical means
- strip paint by heat removal
- remove paint by flame removal
- use solvent-based paint stripper
- wash surfaces prior to application of coatings
- dry and wet abrading by hand and mechanical application
- remove a range of wallpaper products from walls and/or ceilings
- stop, fill and sand surfaces to a smooth finish
- protect surrounding surfaces by drop sheets, masking or removal of objects
- identify surface defects and subsequent rectification of each
- identify surface coatings defects and subsequent rectification of each
- prepare surface prior to application of decorative finishes to a high standard

**(2) Pre-requisite Relationship of Units**

Pre-requisite skills:

- BCGCOR0061A Use plant and equipment

This unit may be assessed concurrently with:

- BCGCOR0191A Prepare for construction process (painting & decorating)
- BCGCOR0212A Prepare surfaces
- BCGPAD1282A Apply paint by brush/roller
- BCGPAD0772A Apply paint by spray
- BCGPAD0763A Apply decorative finishes
- BCGPAD1332A Apply wallpaper
- BCGPAD1302A Apply clear timber finish

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment as it relates to OH&S standards and requirements
- specifications interpretation
- hazards associated with lead, solvents, chemicals and dust
- variances in work carried out within sectors of painting and decorating industry and associated standards in relation to the preparation of surfaces:
  - new building (residential/commercial/high-rise)
  - maintenance/renovation/refurbishment
  - shop-fitting
  - restoration
  - conservation
  - industrial/protective coatings
- responsibilities with regard to:
  - heritage listed buildings
  - conservation areas
  - environmental requirements
- surface coatings technology
- properties and surface preparation requirements of new substrates
- surface coatings defects – prevention and/or rectification procedures
- preparatory products
- capability and maintenance of hand and power tools
- differing procedures and products associated with removal of wallpaper
- differing procedures and products associated with removal of defective coatings
- differing procedures and products associated with preparation of sound surfaces
- corrosion process and protection of metals

**Underpinning Knowledge and Skills (Cont'd)****Skills**

The ability to:

- work safely, efficiently and effectively
- organise work
- interpret specifications
- take off dimensions, quantities, types of materials, position of materials, application requirements for a wide range of surfaces
- identify and select materials for surface preparation
- use tools equipment and materials
- prepare materials
- check prepared surface for defects
- remove corrosion by hand or mechanical means
- strip paint by heat removal
- remove paint by flame removal
- remove paint using solvent -based paint stripper
- wash surfaces prior to application of coatings by hand or using equipment
- abrade surfaces using dry and wet hand and mechanical methods
- remove range of wallpaper products from walls and/or ceilings
- stop, fill and sand prepared surfaces to a smooth finish
- protect surrounding surfaces by using drop sheets, masking or removal of objects
- identify range of common surface defects and rectify each
- identify range of surface coatings defects and rectify each
- prepare surfaces for application of decorative finishes to high standard
- clean area and dispose of waste
- store materials/components
- respond to emergency situations

**(4) Resource Implications**

The following resources should be provided:

- workplace or simulated workplace location.
- tools and equipment appropriate to application processes
- materials relevant to application processes
- specifications relevant to surface preparation activities

**(5) Method of Assessment**

Competency should be assessed through direct observation of application to tasks and questions related to underpinning knowledge.

Competency should be assessed under general guidance, checking at various stages of the process and at completion of the activity against performance criteria and specifications.

**(6) Context Assessment**

Competency should be assessed in the normal or simulated workplace environment

Assessment should be while tasks are undertaken either individually or as part of a team under limited supervision.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>• Carries out established processes</li> <li>• Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Manages process</li> <li>• Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes principles and procedures</li> <li>• Evaluates and reshapes process</li> <li>• Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 3	
Communicate ideas and information	Level -	
Plan and organise activities	Level 3	
Work with others and in team	Level -	
Use mathematical ideas and techniques	Level 3	
Solve problems	Level 2	
Use technology	Level 3	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.



## BCGMAS0091A: Carry out excavation and install support

### Competency Descriptor:

This unit deals with the skills and knowledge required to effectively carry out excavation work and to install support for excavation, and applies to individuals working in trenching and foundation work in the construction industry.

### Competency Field:

General Construction

### ELEMENT OF COMPETENCY

### PERFORMANCE CRITERIA

- |    |  |     |  |
|----|--|-----|--|
| 1. | Plan and prepare work                        | 1.1 | Quality Assurance requirements of company's construction operations recognised and adhered to.   |
|    |  | 1.2 | Occupational Health and Safety (OH&S) requirements recognised and adhered to in accordance with application tasks and workplace environment. |
|    |  | 1.3 | Appropriate personal protective equipment selected, correctly fitted and used.   |
|    |  | 1.4 | Tools and equipment requirements identified to supervisor's instructions, consistent with the needs of the job.                              |
| 2. | Locate excavation and erect safety equipment | 2.1 | Excavation located from instruction.   |
|    |  | 2.2 | Site pegs installed, service markers identified and excavation limits marked.  |
|    |  | 2.3 | Safety barricades, signs and lights erected in positions as required by OH&S requirements.   |
| 3. | Select tools and equipment                   | 3.1 | OH&S requirements associated with use of tools and equipment recognised and adhered to.  |
|    |  | 3.2 | Personal protective equipment items selected in accordance with excavation method and conditions correctly fitted and used.                  |
|    |  | 3.3 | Hand tools and equipment selected consistent with the needs of the job, checked for serviceability and any faults reported to supervisor.    |

- |    |                                      |     |  |
|----|--------------------------------------|-----|--|
| 4. | Dig excavations by hand              | 4.1 | Where appropriate temporary drainage system established to divert surface and subsurface water to storm water drainage system. |
|    |                                      | 4.2 | Excavations safely dug with hand tools under direction.  |
|    |                                      | 4.3 | Service markers or taped areas identified.   |
|    |                                      | 4.4 | Damage or interference with underground services (power, water, gas, telephone) avoided during excavation process.             |
|    |                                      | 4.5 | Excavations cleaned out with hand tools, free from loose material.   |
| 5. | Assist machine excavation operations | 5.1 | Machine operator assisted with excavation by verbal and trimming support, ensuring it is to line and depth.                    |
|    |                                      | 5.2 | Excavation cleaned out by hand according to job requirements and instructions.   |
| 6. | Install excavation support           | 6.1 | Excavation works carried out in accordance with regulatory authority's requirements.   |
|    |                                      | 6.2 | Trench/excavation support installed to instruction according to OH&S regulations.  |
| 7. | Clean up                             | 7.1 | Site cleaned and cleared of unwanted excavated material.   |
|    |                                      | 7.2 | Tools cleaned, maintained and stored.  |

## RANGE STATEMENT

This unit applies to excavations carried out by hand and assisting excavator operators with their operation.

This unit applies to trench/excavation depth not exceeding 1.5m excavation and includes but is not limited to:

- post holes
- pits
- pad excavations
- trenches
- levelling of work area

Regulatory authorities are those under the Statutory Legislation governing:

- water
- sewerage
- gas
- electricity
- telephone

OH&S requirements are to be in accordance with the Statutory Legislation and regulations.

Work is to be undertaken in a team situation or individually under supervision.

Reporting of faults may be written or verbal.

## EVIDENCE GUIDE

Competency is to be demonstrated by carrying out the safe and effective excavation and/or support of at least two different types of excavations from those listed within the range of variables statement, relevant to the work orientation.

### (1) Critical Aspects and Evidence

It is essential that competence is observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during excavation processes
- identify and understand instruction relevant to the location of excavation
- demonstrate safe and effective operational use of tools and equipment
- interactively communicate with others to ensure safe and effective operations.

### (2) Pre-requisite Relationship of Units

- BCGCOR0001A Carry out interactive workplace communication
- BCGCOR0011A Carry out OH&S requirements
- BCGCOR0051A Use hand and power tools

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- hand tools and equipment
- materials handling
- measurement and calculations
- workplace communications
- regulatory authority's requirement for excavation/support
- range of "in ground" services and relevant markers/identifiers
- types of soil

Skills

The ability to:

- work safely to instructions
- use hand tools and equipment
- handle material
- measure relevant to excavation process
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- general construction materials for excavation support
- hand tools appropriate to excavation processes
- work area appropriate for the excavation activities
- appropriate OH&S safety resources to suit excavation location

**(5) Method of Assessment**

Competency shall be assessed while work is being done, under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based on integrated project work. Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of the process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## **BCGMAS0101A: Carry out concreting to simple forms**

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively and safely carry out concreting to simple formwork, and applies to all individuals working in the preparation and placing of formwork and concrete.

Competency Field:

General Construction

<b>ELEMENT OF COMPETENCY</b>	<b>PERFORMANCE CRITERIA</b>
1. Select tools and equipment	1.1 Quality Assurance requirements recognised and adhered to in accordance with company's construction operations. 1.2 Occupational Health and Safety (OH&S) requirements recognised and adhered to in accordance with application tasks and workplace environment. 1.3 Appropriate personal protective equipment selected, correctly fitted and used. 1.4 Tools and equipment selected to instructions consistent with job requirements checked for serviceability and any faults reported to supervisor.
2. Erect and strip simple formwork	2.1 Design of formwork identified from drawings/supervisors instructions. 2.2 Formwork safely erected on commencement and stripped on completion under direction of supervisor. 2.3 Stripping agent applied to erected formwork, where appropriate. 2.4 Timber components dewatered following stripping of formwork. 2.5 All components cleaned, stacked and stored for re-use or bundled for removal.
3. Place and tie reinforcement	3.1 Reinforcing components safely handled and carried to required position. 3.2 Reinforcing bars, rods, stirrups and mesh positioned under supervisor's directions. 3.3 Bar chairs and spacers located in place, checking minimum edge cover under the direction of supervisor.

- |    |                |     |  |
|----|----------------|-----|--|
| 4. | Place concrete | 4.1 | Formwork/excavation cleaned of excess material and debris prior to concrete placement.                         |
|    |                | 4.2 | Concrete correctly proportioned and mixed and/or safely transported by wheelbarrow and placed under direction. |
|    |                | 4.3 | Pump line/chute controlled and concrete placed as directed.  |
|    |                | 4.4 | Concrete spread as directed to specified levels.   |
|    |                | 4.5 | Concrete consolidated under direction and screeded to finished levels as directed.                             |
|    |                | 4.6 | Surface of concrete finished as directed to specified finish.  |
| 5. | Clean up       | 5.1 | Formwork components removed from site.   |
|    |                | 5.2 | Pour site and surrounds cleared of concrete spills and other debris and surface left in safe condition.        |
|    |                | 5.3 | Worksite cleared of debris and unused materials.   |
|    |                | 5.4 | Tools and equipment cleaned, maintained and stored.  |

## RANGE OF STATEMENT

This unit applies to placing concrete to simple forms and excavations which includes:

- post holes
- trench foundations
- pad foundations
- slabs
- pathways
- simple concrete aprons
- channels
- garden edges

Formwork in this unit applies to edging forms where structural components would include:

- edge boards
- pegs
- struts
- bracing

Personal protective equipment may include:

- overalls
- boots
- hard hat/cap
- safety glasses/goggles
- gum boots
- face masks
- waterproof pants and jacket

Concrete finishes include:

- wood floated
- steel floated
- broom brushed

Excess material and debris includes:

- excavated loose soil
- off cut timber
- paper
- rags
- sticks
- nails

Concrete placement methods include:

- shovel
- wheelbarrow
- chute
- pump line

Work is to be undertaken in a team situation or individually under supervision.

Reporting of faults may be verbal or written.

OH&S requirements are in accordance with Statutory requirements.

## EVIDENCE GUIDE

Competency is to be demonstrated by the safe installation of formwork, reinforcement and concrete using any two of the simple forms listed within the range statement relevant to the work orientation.

### (1) Critical Aspects and Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during construction processes
- demonstrate safe and effective operational use of tools, plant and equipment
- interactively communicate with others to ensure safe and effective operations

### (2) Pre-requisite Relationship of Units

- BCGCOR0011A Carry out OH&S requirements
- BCGCOR0051A Use hand and power tools
- BCGCOR0061A Use small plant and equipment



**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- hand tools and equipment
- concrete and formwork materials
- materials handling
- measurement and proportion
- transporting and placing concrete
- levelling equipment
- simple formwork and reinforcement components
- select and handle materials appropriate to concreting processes

Skills

The ability to:

- work safely to instructions
- measure relative to the concreting process
- use power tools and hand tools
- mix concrete by hand
- use simple levelling equipment
- communicate effectively
- select and handle materials appropriate to concreting processes

**(4) Resource Implications**

The following resources should be made available:

- general construction materials relevant to forming, re inforcing and placement of concrete
- hand tools and power tools appropriate to construction process
- tools and equipment appropriate to construction process
- suitable work area appropriate to concreting process
- information relevant to OH&S requirements

**(5) Method of Assessment**

Competency shall be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based on inte grated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGTIL0121A: Prepare for wall and floor tiling**

## Competency Descriptor:

This unit deals with the skills and knowledge required to effectively carry out work in preparing the process for laying wall and floor tiles, and applies to all individuals involve in tiling.

## Competency Field:

General Construction

**ELEMENT OF COMPETENCY PERFORMANCE CRITERIA**

1	Plan for the construction process	1.1	Quality Assurance requirements of company's construction operations recognised and adhered to.
		1.2	Preparation and planning requirements identified from drawings/work location and/or supervisor's instructions.
		1.3	OH&S requirements identified and adhered to in accordance with application tasks and workplace environment.
		1.4	Safety hazards identified and correct procedures adopted to minimise risk to self and others.
		1.5	Materials selected to supervisor's instructions and safely handled and stored/located ready for application.
		1.6	Appropriate personal protective equipment selected, correctly fitted and used.
		1.7	Tools and equipment selected consistent with the job requirements, checked for serviceability and any faults reported to supervisor.
		1.8	Fixing/fasteners selected consistent with job requirements, where applicable, and checked for serviceability.
2	Prepare materials selected for construction process	2.1	Activities for material preparation identified from specifications or supervisor's instructions.
		2.2	Material preparation carried out to satisfy requirements of application process.
3	Prepare work area suitable for construction process	3.1	Activities to be carried out in work area identified from type of tile, surface to be covered, method of application and access to surface.

- |   |   |     |   |
|---|---|-----|---|
|   |   | 3.2 | Work area prepared for the application process to specifications or supervisor's instructions.  |
| 4 | Use tools, plant and equipment appropriate for construction process     | 4.1 | Regular hand and power tools suitable for application process identified to job requirements.   |
|   |   | 4.2 | Hand and power tools used safely and effectively to carry out processes.  |
| 5 | Prepare underlay/sheeting for floor and walls                           | 5.1 | Assistance with underlay preparation provided under instructions and supervision.   |
|   |   | 5.2 | Surface finished flat/level with joints flush and sealed.   |
| 6 | Prepare background of brick, concrete or blockwork for solid plastering | 6.1 | Structure identified and surface wire and brushed to remove loose material and holes. Depressions and gaps filled with suitable patching material to supervisor's instructions. |
|   |   | 6.2 | Materials for splash coat proportioned and mixed to instructions ready for application to wet surface.  |
| 7 | Prepare for render surface for tiling                                   | 7.1 | Horizontal/vertical surrounds prepared for tiling process in accordance with type of tile and specified finish, where applicable.   |
|   |   | 7.2 | Materials for render coat proportioned and mixed to instructions ready for application.   |
|   |   | 7.3 | Rendered surface scratched and dried to instructions in accordance with specifications.   |
| 8 | Clean up  | 8.1 | Materials stacked/stored for re-use or disposal.  |
|   |   | 8.2 | Work area cleared.  |
|   |   | 8.3 | Tools and equipment cleaned, maintained and stored.   |
|   |   | 8.4 | Waste disposed of using appropriate method to NEPA requirements.  |

## RANGE STATEMENT

This unit applies to the preparation and construction processes carried out in preparing for the tiling of wall and floor surfaces.

Types of tiles include:

- ceramic
- marble
- stone
- granite
- terra cotta

Construction processes include:

- use of underlay material
- rendering to provide flat surface
- preparing of surfaces
- workplace preparation

Tools and equipment include but are not limited to:

- hammers
- saws
- measuring ruler/tape
- power saw
- power drills and screwdriver
- cement sheet cutters
- spirit levels
- concrete mixers
- shovels
- wheelbarrows
- wire brushes
- brooms
- power sander

Underlay materials include:

- plasterboard
- fibro cement

Fixing and fasteners include but are not limited to:

- plasterboard nails
- clouts
- soft sheet nails
- self tapping screws
- wall board adhesive

Surrounds for tiling include:

- extruded metal sections
- timber moulding

Patching materials include but are not limited to:

- plaster
- sand and cement
- cornice adhesive
- fillers (pre-mixed and mix)
- caulking compounds

Work is to be done under supervision with instructions being as part of supervisor's directions, consistent with job specifications.

Reporting of faults may be verbal or written.

OH&S requirements to be in accordance with Statutory Legislative regulations.

## EVIDENCE GUIDE

Competency is to be demonstrated by carrying out the safe and effective preparation for tiling applications in accordance with the performance criteria using any of the processes and range of materials listed within the range of variables statement.

### (1) Critical Aspects of Evidence

It is essential that competence is observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during application of construction processes
- demonstrate safe and effective operational use of tools and equipment
- give particular attention to specified finish of surfaces ready for tiling
- interactively communicate with others to ensure safe and effective workplace operations

### (2) Pre-requisite Relationship of Units

- BCGCOR0011A Carry out OH&S requirements
- BCGCOR0051A Use hand and power tools
- BCGCOR0061A Use small plant and equipment

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- drawings and specifications
- portable power tools
- hand tools and equipment
- materials relative to wall and floor tiling
- fixing and fasteners consistent with wall and floor tiling requirements
- workplace communications
- materials handling
- measurement relative to wall and floor tiling

Skills

The ability to:

- work safely to instructions
- use power tools and hand tools
- handle material
- select material
- measure relative to the process
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- general construction materials relevant to wall and floor tiling preparation activities
- hand and power tools appropriate to wall and floor tiling processes
- plant and equipment appropriate to wall and floor tiling processes
- suitable work area appropriate to wall and floor tiling activities

**(5) Method of Assessment**

Competency shall be assessed while work is undertaken under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based on integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.



**BCGMAS0131A: Prepare for solid plastering**

## Competency Descriptor:

This unit deals with the skills and knowledge required to effectively prepare the process for carrying out solid plastering work, and applies to individuals working in masonry in the construction industry.

## Competency Field:

General Construction

**ELEMENT OF COMPETENCY PERFORMANCE CRITERIA**

1. Plan for construction process	<p>1.1 Quality Assurance requirements of company's construction operations recognised and adhered to.</p> <p>1.2 Preparation and planning requirements identified from drawings/work location and/or supervisor's instructions.</p> <p>1.3 OH&amp;S requirements identified and adhered to in accordance with application tasks and workplace environment.</p> <p>1.4 Safety hazards identified and correct procedures adopted to minimise risk to self and others.</p> <p>1.5 Materials selected according to supervisor's instructions safely handled and stored/located ready for application.</p> <p>1.6 Appropriate personal protective equipment selected, correctly fitted and used.</p> <p>1.7 Tools and equipment selected consistent with the job requirements, checked for serviceability and any faults reported to supervisor.</p> <p>1.8 Fixing/fasteners selected consistent with the job requirements where applicable and checked for serviceability.</p>
2. Prepare materials selected for construction process	<p>2.1 Activities for material preparation identified from specifications or supervisor's instructions.</p> <p>2.2 Material preparation carried out to satisfy requirements of application process.</p>
3. Prepare work area suitable for construction process	<p>3.1 Activities to be carried out in work area identified from surface to be covered, method of application and access to surface.</p>

		3.2	Work area prepared for construction process according to supervisor's instructions.
4.	Use tools, plant and equipment appropriate for construction process	4.1	Regular hand and power tools suitable for application process identified to job requirements.
		4.2	Hand and power tools used safely and effectively to carry out processes where applicable.
5.	Prepare background of brick, concrete or blockwork for solid plastering	5.1	Structure identified and surface prepared. Depressions patched with suitable material to supervisor's instructions.
		5.2	Concrete surface where appropriate is roughened or adhesive applied.
		5.3	Materials for scratch coat proportioned and mixed to instructions ready for application to wet surface.
6.	Clean up	6.1	Materials stacked/stored for re-use or disposed of.
		6.2	Work area cleared.
		6.3	Tools and equipment cleaned, maintained and stored.

## RANGE OF VARIABLES

This unit applies to the preparation and construction processes carried out in preparing for the application of solid plastering to surfaces.

Background surfaces for application of solid plastering include but not limited to:

- concrete
- concrete block work
- brickwork
- stonework
- polystyrene
- expanded metal or bird wire

Construction process includes:

- application of solid plaster
- preparation of surfaces
- finish of surfaces
- workplace preparation

Material preparation may include:

- locating loose materials for mixing
- preparing brackets for fixing to steelwork
- cutting expanded metal or bird-wire for placement

Tools and equipment may include but are not limited to:

- measuring tape/rule
- brushes
- broom
- screed boards
- scaffolding
- spirit level
- straight edges
- concrete mixer
- shovels
- wheelbarrows
- power leads
- hoses
- masonry hammer

Patching materials include but are not limited to:

- sand and cement
- plaster
- cornice adhesive
- caulking compounds

Work is to be undertaken either as part of a team or individually, under supervision with instruction being as part of the supervisor's directions either verbal or written.

Reporting of faults may be verbal or written.

OH&S requirements to be in accordance with the Statutory regulations.

Work area preparation may include:

- cleaning of area
- erecting restricted height scaffolding
- setting up concrete mixer
- establishing temporary water and power supply

Personal protective equipment may include:

- overalls
- waterproof pants and jacket
- boots
- water (rubber) boots
- gloves
- dust masks/respirators
- hard hat/cap
- safety goggles

## EVIDENCE GUIDE

Competency is to be demonstrated by carrying out the safe and effective preparation for solid plastering applications in accordance with performance criteria using any of the range of materials and processes listed within the range of variables statement.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during application of construction processes
- demonstrate safe and effective operational use of tools, plant and equipment
- interactively communicate with others to ensure safe and effective workplace operations

### (2) Pre-requisite Relationship of Units

- BCGCOR0011A Carry out OH&S requirements
- BCGCOR0051A Use hand and power tools
- BCGCOR0061A Use small plant and equipment
- BCGCOR0071A Erect and dismantle restricted height scaffolding

### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- workplace and equipment safety requirements
- drawings and specifications
- portable power tools
- hand tools and equipment
- materials relative to solid plastering
- materials handling
- measurement relative to solid plastering
- fixing and fasteners consistent with solid plastering requirements
- workplace communications

#### Skills

The ability to:

- work safely to instructions
- use power and hand tools
- handle material
- select material
- communicate effectively
- measure relative to process

**(4) Resource Implications**

The following resources should be made available:

- general construction materials relevant to solid plastering
- hand and power tools appropriate to solid plastering process
- plant and equipment appropriate to solid plastering process
- suitable work area appropriate to solid plastering activities

**(5) Method of Assessment**

Competency should be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based on integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>• Carries out established processes</li> <li>• Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Manages process</li> <li>• Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes principles and procedures</li> <li>• Evaluates and reshapes process</li> <li>• Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## **BCGMAS0141A: Prepare for dry wall plastering**

### Competency Descriptor:

This unit deals with the skills and knowledge required to effectively carry out the preparation process of dry wall plastering, and applies to individuals erecting dry wall plastering in the construction industry.

### Competency Field:

General Construction

<b>ELEMENT OF COMPETENCY</b>	<b>PERFORMANCE CRITERIA</b>
1. Plan for construction process	<p>1.1 Quality Assurance requirements of company's construction operations recognised and adhered to.</p> <p>1.2 Preparation and planning requirements identified from drawings/work location and/or supervisor's instructions.</p> <p>1.3 OH&amp;S requirements identified and adhered to in accordance with application tasks and workplace environment.</p> <p>1.4 Safety hazards identified and correct procedures adopted in order to minimise risk to self and others.</p> <p>1.5 Materials selected to supervisor's instructions, safely handled and stored/located until ready for application.</p> <p>1.6 Appropriate personal protective equipment selected, correctly fitted and used.</p> <p>1.7 Tools and equipment selected consistent with the job requirements, checked for serviceability and any faults reported to supervisor.</p> <p>1.8 Fixtures/fasteners selected consistent with job requirements and checked for serviceability.</p>
2. Prepare materials selected for construction process	<p>2.1 Activities for material preparation identified from specifications or supervisor's instructions.</p> <p>2.2 Fasteners/fixing prepared for installation according to instruction.</p> <p>2.3 Material preparation carried out to satisfy the requirements of the construction process.</p>

- |    |   |     |  |
|----|---|-----|--|
| 3. | Prepare work area suitable for construction process                 | 3.1 | Activities to be carried out in work area identified from surfaces to be lined and height to be accessed.              |
|    |   | 3.2 | Work area prepared for construction process to supervisor's instructions.  |
| 4. | Use tools, plant and equipment appropriate for construction process | 4.1 | Regular hand and power tools suitable for application process identified to job requirements.                          |
|    |   | 4.2 | Hand and power tools used safely and effectively to carry out processes.   |
| 5. | Assist with sheet material installation                             | 5.1 | Sheet materials identified from stack and safely distributed to required location.                                     |
|    |   | 5.2 | Assistance provided with cutting sheets to job requirements.   |
|    |   | 5.3 | Assistance provided with placing and fixing sheets to job requirements.  |
| 6. | Clean-up  | 6.1 | Materials stacked/stored for re-use or removal.  |
|    |   | 6.2 | Work area cleared of debris.   |
|    |   | 6.3 | Tools and equipment cleaned, maintained and stored.  |
|    |   | 6.4 | Waste disposed of using appropriate method according to the National Environmental Protection Act (NEPA) requirements. |

## RANGE STATEMENT

This unit applies to the preparation processes carried out to support the installing of plaster sheeting and cornering to walls and ceilings which includes:

- plasterboard
- water resistant plasterboard

Background support of plaster sheeting includes:

- timber framework
- light steel framework
- metal furring channels
- timber battens

Work area preparation may include:

- clearing area
- preparing saw stools and planks
- work platform



Fixing and fasteners include but are not limited to:

- nails
- plasterboard nails
- clouts head nail
- self tapping screws
- wallboard adhesive
- cornice adhesive

Construction process includes:

- fixing of battens/furring channels
- worksite preparation
- fixing of sheeting
- fixing of cornice
- finish of surface

Tools and equipment may include but are not limited to:

- measuring tape/rule
- hammer
- saws
- power drills and screwdrivers
- adhesive gun
- cutting knife
- scrapers
- saw stools and planks
- steel floats
- power leads

Material preparation may include:

- cutting corner bead to length
- identifying and marking sheets for location
- fixing material and fasteners located ready for use

Work is to be undertaken as part of a team under supervision, with instructions from supervisor and can either verbal or written.

Reporting of faults may be verbal or written.

OH&S requirements to be in accordance with statutory regulations.

## EVIDENCE GUIDE

Competency is to be demonstrated by carrying out the safe and effective preparation for dry wall plastering application in accordance with the performance criteria using any of the range of materials and processes listed within the range of variables statement.

**(1) Critical Aspects of Evidence**

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during application of construction process
- demonstrate safe and effective operational use of tools, plant and equipment
- adopt and use correct procedures in handling plaster sheets
- interactively communicate with others to ensure safe and effective installation processes

**(2) Pre-requisite Relationship of Units**

- BCGCOR0011A Carry out OH&S requirements
- BCGCOR0051A Use hand and power tools
- BCGCOR0061A Use small plant and equipment

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- drawings and specifications
- portable power tools
- hand tools and equipment
- materials relative to dry wall plastering
- materials handling
- measurement relative to dry wall plastering
- fixing and fasteners consistent with dry wall plastering requirements
- workplace communication

Skills

The ability to:

- work safely to instructions
- use hand and power tools
- handle material
- select material
- communicate effectively
- measure relative to the process

**(4) Resource Implications**

The following resources should be made available:

- construction materials relevant to dry wall plastering
- hand and power tools appropriate to dry wall plastering process
- equipment appropriate to dry wall plastering process
- suitable work area appropriate to dry wall plastering activities

**(5) Method of Assessment**

Competency should be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based on integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>• Carries out established processes</li> <li>• Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Manages process</li> <li>• Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes principles and procedures</li> <li>• Evaluates and reshapes process</li> <li>• Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## **BCGMAS0151A: Prepare for construction process (Brick/Block laying)**

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively prepare the construction process for laying concrete blocks/bricks, and applies to individuals working in masonry/concrete trades in the construction industry.

Competency Field:

General Construction

<b>ELEMENT OF COMPETENCY</b>		<b>PERFORMANCE CRITERIA</b>	
1.	Plan for construction process	1.1	Quality Assurance requirements of company's construction operations recognised and adhered to.
		1.2	Job requirements identified from drawings and supervisor's instructions.
		1.3	Occupational Health and Safety (OH&S) requirements identified and adhered to according to application tasks and workplace environment.
		1.4	Safety hazards identified and correct procedures adopted to minimise risk to self and others.
		1.5	Materials selected to supervisor's instructions, safely handled and stored/located and ready for application.
		1.6	Appropriate personal protective equipment selected, correctly fitted and used.
		1.7	Tools and equipment selected are consistent with job requirements, checked for serviceability and any faults reported to supervisor.
2.	Prepare materials selected for construction process	2.1	Activities for material preparation identified from specifications or supervisor's instructions.
		2.2	Material preparation carried out to satisfy requirements of construction process.
		2.3	Correct manual handling techniques used to remove materials to location of placement.
		2.4	Components distributed and stacked to suit job location and construction sequence.

3.	Prepare work area suitable for construction process	3.1	Activities to be carried out in work area identified from type of brick/block, planned layout of construction and access location.
		3.2	Work area prepared for construction process according to supervisor's instructions.
4.	Use tools, plant and equipment appropriate for construction process	4.1	Regular hand and power tools suitable for application process identified to job requirements.
		4.2	Hand and power tools used safely and effectively to carry out processes.
5.	Mix mortar/concrete by hand	5.1	Materials for mortar/concrete selected to instruction.
		5.2	Additives for mortar/concrete selected to mix requirements.
		5.3	Specified proportions of materials for mortar/concrete mixture prepared accurately in accordance with instruction.
		5.4	Mortar/concrete materials mixed to a workable consistency.
6.	Assist with brick/block works	6.1	Bricks/blocks selected, visually checked to ensure that specifications are met including colour matching surrounding area and distributed to location.
		6.2	Surface brushed/scraped/washed and clean.
7.	Clean-up	7.1	Materials stacked/stored for re-use or removal.
		7.2	Work area cleared.
		7.3	Tools and equipment cleaned, maintained and stored.
		7.4	Waste disposed of using appropriate method according to EPA requirements.

## RANGE STATEMENT

This unit applies to the preparation processes carried out to support the laying of brickwork or block work.

Construction processes includes:

- worksite preparation
- preparation for brick/block laying
- finish brickwork/block work face

Tools and equipment include but are not limited to:

- hammer
- bolster
- shovel
- measuring tape/rule
- concrete mixer
- angle grinder
- masonry saw
- power leads
- hoses
- brushes and brooms
- wheelbarrows
- mortar boards
- bucket

Specifications for bricks/blocks should be part of Quality Assurance requirements and include:

- size
- shape
- sharp arises (where applicable)
- colour
- strength

Materials preparation may include:

- cutting concrete blocks
- locating lintels ready for placement
- distributing vents
- cutting and distributing reinforcement
- preparing materials for batching for mortar and concrete

Work is to be undertaken as part of a team under supervision with instructions being part of supervisor's directions, either verbal or written.

OH&S requirements to be in accordance with Statutory Legislation and regulations.

Reporting of faults may be verbal or writ ten.

Materials in addition to bricks/blocks include:

- cement and sand
- gravel
- adhesive
- brick/block reinforcement
- steel lintels
- mortar additives (workability and damp proofing)

Masonry units may include:

- wire cut bricks
- pressed bricks
- solid concrete blocks
- hollow concrete blocks

Work area preparation may include:

- cleaning strip footings or slab
- setting up concrete mixer
- locating mortar boards
- establishing temporary water and power supply
- preparing access for supply of mortar/concrete

## EVIDENCE GUIDE

Competency is to be demonstrated by carrying out the safe and effective preparation for the laying of bricks/blocks in accordance with the performance criteria using any of the listed range of variables with either brickwork or block work.

### (1) Critical Aspects of Evidence

It is essential that competence is observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during application of construction processes
- demonstrate safe and effective operational use of tools, plant and equipment
- adopt and use correct procedures to handle and place materials
- interactively communicate with others to ensure safe and effective worksite operations

### (2) Pre-requisite Relationship of Units

- BCGCOR0011A Carry out OH&S requirements
- BCGCOR0051A Use hand and power tools
- BCGCOR0061A Use small plant and equipment
- BCGCOR0111A Handle construction material

### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- workplace and equipment safety requirements
- drawings and specifications
- portable power tools
- hand tools and equipment
- materials handling
- mortar and concrete constituents and ratio of mix
- measurement relative to brick/block work
- accessories associated with brickwork/block work construction
- workplace communications

#### Skills

The ability to:

- work safely to instructions
- read drawings
- use power tools and hand tools
- handle material
- select material
- measure relative to the construction process
- mix mortar and concrete manually and with mixer
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- construction materials relevant to brick/block work
- hand and power tools appropriate to brick/block work processes
- plant and equipment appropriate to brick/block work processes
- suitable work area appropriate to construction process

**(5) Method of Assessment**

Competency shall be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based on integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2	Level 3.
<ul style="list-style-type: none"> <li>• Carries out established processes</li> <li>• Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Manages process</li> <li>• Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes principles and procedures</li> <li>• Evaluates and reshapes process</li> <li>• Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.



## BCGCAR0161A: Prepare for carpentry construction

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively prepare the process for carrying out construction work in carpentry, and applies to individuals working in the occupation.

Competency Field:

General Construction

ELEMENT OF COMPETENCY	PERFORMANCE CRITERIA
1. Plan for construction process	1.1 Quality Assurance requirements of company's construction operations recognised and adhered to. 1.2 Preparation and planning requirements identified from drawings and/or supervisor's instructions. 1.3 Occupational Health and Safety (OH&S) requirements identified and adhered to in accordance with application tasks and workplace environment. 1.4 Safety hazards identified and correct procedures adopted to minimise risk to self and others. 1.5 Materials selected to supervisor's instructions, safely handled, stored/located and ready for application. 1.6 Appropriate personal protective equipment selected, correctly fitted and used. 1.7 Tools and equipment selected consistent with job requirements, checked for serviceability and any faults reported to supervisor. 1.8 Fixing/fastenings selected to instructions consistent with job requirements.
2. Prepare materials selected for construction process	2.1 Activities for material preparation identified from specifications or supervisor's instructions. 2.2 Material preparation carried out to satisfy requirements of construction process.

- |    |  |     |   |
|----|--|-----|---|
| 3. | Prepare work area suitable for construction process          | 3.1 | Activities to be carried out in work area identified from drawing details of proposed construction and supervisor's instructions.                           |
|    |  | 3.2 | Work area prepared for construction of temporary security fence and site structures, building layout and workstation according to supervisor's instruction. |
| 4. | Use tools and equipment appropriate for construction process | 4.1 | Regular hand and power tools suitable for application process identified to job requirements.   |
|    |  | 4.2 | Hand and power tools used safely and effectively according to instruction to carry out construction processes.  |
| 5. | Select materials and cut components                          | 5.1 | Material obtained from stock to instruction.  |
|    |  | 5.2 | Correct manual handling techniques used to move and place materials.  |
|    |  | 5.3 | Materials safely moved to work area.  |
|    |  | 5.4 | Docking/drop saw used to accurately cut one or multiple components to same length according to given instruction.   |
| 6. | Distribute components  | 6.1 | Cut components distributed and stacked to suit job location and sequence.   |
| 7. | Erect temporary fencing                                      | 7.1 | Posts are appropriately placed, aligned and firmly fixed.   |
|    |  | 7.2 | Stiles and cladding materials (metal/board) are firmly fixed.   |
|    |  | 7.3 | Entrance is of specified size and gate opens, swings and shuts without difficulty.  |
| 8. | Clean-up   | 8.1 | Unused material stacked/stored for re-use.  |
|    |  | 8.2 | Work area cleared.  |
|    |  | 8.3 | Tools and equipment cleaned, maintained and stored.   |
|    |  | 8.4 | Waste disposed of using appropriate method according to the Environmental Protection Agency (NEPA) requirements.  |

## RANGE STATEMENT

This unit applies to the preparation processes associated with carpentry construction work based on the construction of timber partition framing .

Tools and equipment may include but are not limited to:

- measuring tape/rule
- hammer
- docking saw
- jigs/stops
- saw stools
- work bench
- clamps
- squares

Personal protective equipment may include but not limited to:

- overalls
- jacket
- boots
- gloves
- safety goggles/glasses
- ear plugs/muffs
- dust masks/respirators
- hard hat/cap

Safety hazards may include but are not limited to:

- restricted access
- location of power leads
- dust
- off cut material
- lighting
- limited storage space

Construction processes includes:

- workplace preparation
- materials preparation
- assembling of partitions
- erecting and fixing of partitions

Material preparation may include:

- stacking of material
- measuring and marking
- cutting and distributing

Work area preparation may include:

- cleaning of area
- setting up for docking saw
- material storage

Fixing/fasteners may include:

- nails
- screws
- bolts
- masonry anchors
- drive/masonry nails

Work is to be undertaken as part of a team under supervision with instruction being part of a supervisor's directions, either verbal or written.

OH&S requirements are to be in accordance with Statutory Legislation and Regulations.

Reporting of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by carrying out the safe and effective preparation of materials and work area for the installation of partition framing in accordance with the listed range of variables.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- correct procedures carried out prior to and during application of construction process
- demonstrate safe and effective operational use of tools, plant and equipment
- interactively communicate with others to ensure safe and effective workplace operations

### (2) Pre-requisite Relationship of Units

- BCGCOR0011A Carry out OH&S requirements
- BCGCOR0051A Use hand and power tools
- BCGCOR0061A Use small plant and equipment

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- portable power tools
- hand tools and equipment
- materials relevant to construction process
- materials handling
- measurement relative to construction process
- drawings and specifications
- fixing and fasteners consistent with construction requirements
- workplace communication
- Quality Assurance

Skills

The ability to:

- work safely to instructions
- interpret drawings
- use power tools and hand tools
- handle material
- select material
- measure relative to processes
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- construction materials relevant to proposed construction
- hand and power tools appropriate to construction processes
- plant and equipment appropriate to construction processes
- suitable work area appropriate to proposed activity

**(5) Method of Assessment**

Competency should be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit should be determined concurrently, based on integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workpla ce environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGCAR0202A: Assemble simple partition frames**

Competence Descriptor:

This unit deals with the skills and knowledge required to effectively assemble simple partition frames from timber or metal, and applies to individuals working in the erection of framed building structures.

Competency Field:

General Construction

**ELEMENT OF  
COMPETENCY****PERFORMANCE CRITERIA**

1. Plan and prepare work	1.1	Quality Assurance requirements of company's construction operations recognised and adhered to.
	1.2	Occupational Health & Safety requirements recognised and adhered to in accordance with application tasks and workplace environment.
	1.3	Material requirements identified from instructions/job drawings and specifications.
	1.4	Appropriate personal protective equipment selected, correctly fitted and used.
	1.5	Tools and equipment selected to carry out processes consistent with job requirements, checked for serviceability and any faults reported to supervisor.
	1.6	Fixing/fastenings selected to specifications and job requirements.
2. Select materials and cut components	2.1	Materials obtained from store or stack to quantity and specification requirements.
	2.2	Required lengths accurately marked or machine stops set to requirements of cutting list.
	2.3	Docking/drop saw used to accurately cut one or multiple components to length.
	2.4	Cut components distributed and stacked to suit job location and sequence of construction.

- |    |                            |     |   |
|----|----------------------------|-----|---|
| 3. | Assemble frames/partitions | 3.1 | Locations for frame member connections marked/prepared to designed measurement spacings.  |
|    |                            | 3.2 | Fixing/fastenings installed securing each junction of frame members tight together, flush on partition face and within + or – 2mm of set-out marks. |
|    |                            | 3.3 | Frame/partition assembled and secured square to specification.  |
|    |                            | 3.4 | Pre-assembled frames/partitions distributed to appropriate location to instructions.  |
|    |                            | 3.5 | Components of frames/partitions impractical to pre-assemble distributed to location as directed by supervisor.                                      |
| 4. | Clean-up                   | 4.1 | Area cleaned free of debris.  |
|    |                            | 4.2 | Waste and unwanted material disposed of safely.   |
|    |                            | 4.3 | Unused materials stored/stacked.  |
|    |                            | 4.4 | Tools and equipment cleaned, maintained and stored.   |

## RANGE STATEMENT

This unit applies to the assembling of simple partition wall frames.

Quality Assurance requirements may include:

- safe working operations
- quality of materials
- control of handling procedures
- attention to specifications

OH&S requirements to be in accordance with Statutory Legislation and regulations and may include:

- workplace environment
- protective clothing
- working platforms
- use of tools and equipment
- hazard control
- handling of materials

Material sections used for construction of frames include:

- timber
- light steel
- aluminium

Personal protective equipment may include:

- overalls
- boots
- gloves
- safety goggles/glasses
- ear plugs/muffs
- dust masks/respirators
- hard hat/cap
- jacket



Tools and equipment may include but are not limited to:

- measuring tape/rule
- hammer
- docking saw/drop saw
- jigs/stops
- power drills/screwdrivers
- saw stools
- clamps
- squares
- pop riveter
- nail gun

Types of fittings/fasteners to be used is dependent on type on material being joined may and include:

- nails
- screws
- self tapping screws
- pop rivets

Work is to be undertaken as part of a team under indirect supervision, with instructions being verbal or written as part of supervisor's directions.

Report of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by the safe and effective preparation and assembly of partition frames using any two of the separate types of different materials listed within the range statement.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulation applicable to workplace operations
- show compliance with organisational policies and procedures including Quality Assurance requirements
- adopt and carry out correct procedures prior to and during application of assembling processes
- demonstrate safe and effective operational use of tools, plant and equipment
- show particular attention to accuracy of marking, cutting and assembling members
- interactively communicate with others to ensure safe and effective work operations

### (2) Pre-requisite Relationship of Units

- BCGCOR0051A Use hand and power tools
- BCGCOR0061A Use small plant and equipment
- BCGCAR0161A Prepare for carpentry construction

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- drawings and specifications
- portable power tools
- hand tools and equipment
- materials relevant to frame assembly
- materials handling
- measurement and calculation
- fixing and fasteners consistent with framework requirements
- workplace communication

Skills

The ability to:

- work safely to instructions
- interpret drawings and specifications
- use power and hand tools
- handle material
- select material
- measure relative to the process
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- construction materials relevant to frame construction
- hand and power tools appropriate to frame assembly process
- plant and equipment appropriate to frame assembly process
- suitable work area appropriate to frame assembly process
- plans and specifications appropriate to construction activity

**(5) Method of Assessment**

Competency should be assessed while work is being done under limited supervision with regular checks, but may include some autonomy when working as part of a team.

Competency in this unit may be determined concurrently, based on integrated project work.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGSTW0222A: Oxy-acetylene cutting**

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively set up and use oxyacetylene cutting equipment, and applies to all individuals involved in carrying out basic cutting of steel in the construction industry.

Competency Field:

General/Civil Construction

<b>ELEMENT OF COMPETENCY</b>		<b>PERFORMANCE CRITERIA</b>	
1	Set up	1.1	OH&S requirements for oxy-acetylene tasks and workplace environment recognised and adhered to.
		1.2	Quality Assurance requirements for company's construction operations recognised and adhered to.
		1.3	Appropriate personal protective equipment selected, correctly fitted and used.
		1.4	Equipment selected in accordance with application tasks, checked for serviceability and any faults reported to supervisor.
		1.5	Hazards identified and removed and the correct fire extinguisher made readily accessible prior to commencing operations.
		1.6	Regulators attached to both oxy and acetylene bottles using current safety procedures in accordance with manufacturer's specifications and OH&S regulations.
		1.7	Equipment tested for leaks and corrective action taken or faults reported to supervisor.
		1.8	Correct pressures and cutting tips used in accordance with material to be cut and manufacturer's specifications.
		1.9	Lines correctly purged prior to lighting up according to manufacturer's recommendations.
		1.10	Material marked accurately and, where applicable and where required, clamped ready for cutting.
2	Cut material	2.1	Torch correctly and safely lit according to manufacturer's specifications and recommendations.
		2.2	Setting of flame correctly adjusted for cutting to manufacturer's recommendations.

		2.3	Correct cutting position adopted .
		2.4	Material safely and correctly cut to set out mark.
3	Shut-down	3.1	Correct closing down procedures used to switch off torch and shut off gas supply.
4	Clean-up	4.1	Debris and unwanted materials removed safely from worksite.
		4.2	Equipment cleaned, maintained and stored.

## RANGE STATEMENT

This unit applies to the use of oxy acetylene equipment to carry out basic cutting of steel

Basic cutting to include:

- cutting up waste for salvage
- cutting reinforcement steel
- cutting holes in plate

OH&S requirements to be in accordance with Statutory legislation and regulations and may include:

- use of oxy acetylene equipment
- safety hazards and hazard control
- protective clothing and equipment
- handling of materials

Quality Assurance requirements may include:

- work procedures
- safety requirements
- control of handling
- use of plant and equipment

Personal protective equipment may include but is not limited to:

- coveralls
- boots
- hard hat/cap
- leather apron
- safety goggles
- leather gloves

Equipment may include but is not limited to:

- cylinders
- regulators
- gas tubing
- cutting blowpipe
- flint lighters
- measuring tape/rule
- clamps
- support stands

Hazards may include but are not limited to:

- flammable materials
- pathway obstacles
- off cut material

Debris and unwanted material may include:

- off cut material
- empty containers
- cardboard
- paper

Work must be done under supervision.

Reporting of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated safely and effectively when cutting material in accordance with the range listed within the range of variables statement.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- show compliance with organisational policies and procedures including Quality Assurance requirements
- adopt and carry out correct procedures prior to setting up oxy acetylene equipment and during the cutting process
- demonstrate safe and effective operational use of tools, plant and equipment
- demonstrate correct procedures in setting up and shutting down oxy acetylene equipment
- give particular attention to safety and elimination of hazards
- demonstrate safe handling of material
- interactively communicate with others to ensure safe operations
- demonstrate effective cutting to produce designed cut material

### (2) Pre-requisite Relationship of Units

Pre-requisites for this unit are:

- BCGCOR0011A Carry out OH&S requirements
- BCGCOR0051A Use hand and power tools
- BCGCOR0061A Use small plant and equipment

### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- workplace and equipment safety requirements including relevant OH&S legislation and regulations
- oxy-acetylene equipment
- hand tools and equipment
- materials relative to oxy-acetylene cutting procedures
- manual handling
- measurement
- drawings, sketches and instructions

#### Skills

The ability to:

- work safely to instructions
- interpret relative drawings and instructions
- use power tools and hand tools
- select material
- measure relative to cutting processes
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- construction materials relative to oxy-acetylene cutting
- oxy-acetylene equipment appropriate to cutting operations
- hand tools and related equipment appropriate to cutting process
- suitable work area appropriate to application activities

**(5) Method of Assessment**

Competency shall be assessed while work is undertaken under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Assessment may be by direct observation of application to tasks or by questioning related to underpinning knowledge.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of the process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>• Carries out established processes</li> <li>• Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Manages process</li> <li>• Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes principles and procedures</li> <li>• Evaluates and reshapes process</li> <li>• Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	To measure self-performance
Communicate ideas and information	Level 1	With members of the work team
Plan and organise activities	Level 1	For self
Work with others and in team	Level 1	In completing scheduled tasks
Use mathematical ideas and techniques	Level 1	As an aid to measure and schedule tasks
Solve problems	Level 1	As an aid to self-development
Use technology	Level 1	To manage scheduling and completion of tasks

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGCOR0272A: Operate elevated work platforms (EWP)****Competency Descriptor:**

This unit deals with the skills and knowledge required to effectively and safely operate elevated work platforms to lift and lower loads at construction and other related work sites, and applies to individuals operating ancillary construction equipment.

**Competency Field:**

General Construction

**ELEMENT OF  
COMPETENCY****PERFORMANCE CRITERIA**

- |                                       |   |
|---------------------------------------|---|
| 1. Plan and prepare work              | 1.1 OH&S requirements associated with operating elevating work platforms and workplace environment recognised and adhered to.     |
|                                       | 1.2 Workplace operations plan identified in accordance with job requirements and surrounding activities and environment.          |
|                                       | 1.3 Appropriate personal protective equipment selected, correctly fitted and used.  |
|                                       | 1.4 Equipment selected consistent with job requirements and checked for serviceability.   |
|                                       | 1.5 Safety hazards identified and correct procedures used to minimise risks to self and others.                                   |
|                                       | 1.6 Materials selected in accordance with job drawings and/or from specifications/supervisor's instructions.                      |
| 2. Conduct routine checks of platform | 2.1 Power source determined where applicable and connected to platform equipment to manufacturer's specifications.                |
|                                       | 2.2 Routine pre-operational equipment checks carried out in accordance with checklist from operator's manual.                     |
|                                       | 2.3 Equipment switched on in accordance with start up procedures and controls checked for correct operation and ease of movement. |



- |    |  |     |  |
|----|--|-----|--|
|    |  | 2.4 | Emergency safety devices checked to instructions from operator's manual.   |
|    |  | 2.5 | Work location checked for level ground and floor surface to determine stabilising and safe working area requirements.                  |
| 3. | Locate equipment in place for work application | 3.1 | Platform located in position for work application and stabilisers engaged to set equipment base level into place.                      |
|    |  | 3.2 | Barricades and signage erected to isolate safe working area where applicable.  |
|    |  | 3.3 | Tools, equipment and materials placed into bucket/platform to job application requirements.  |
| 4. | Elevate platform to work location              | 4.1 | Controls operated to manufacturer's recommendations and platform elevated to work position.  |
|    |  | 4.2 | Power switched off and locking devices engaged to operator's manual.   |
|    |  | 4.3 | Work carried out to job specification and safety requirements of operator's manual.  |
| 5. | Lower platform and shut down                   | 5.1 | Controls operated to manufacturer's recommendations and platform lowered to down position.   |
|    |  | 5.2 | Shut down procedures carried out to operator's manual and equipment switched off.  |
| 6. | Clean up                                       | 6.1 | Waste material removed and disposed of safely.   |
|    |  | 6.2 | Unused materials sealed and stored/stacked.  |
|    |  | 6.3 | Tools and equipment removed, cleaned, maintained and stored.   |
|    |  | 6.4 | Stabilisers disengaged, equipment stored and secured and unit removed from location.   |
|    |  | 6.5 | Routine post-operational checks carried out in accordance with checklist from operator's manual and any faults reported to supervisor. |

## RANGE OF VARIABLES

This unit applies to mobile hydraulic and mechanical platforms not exceeding 11 metres in lift capacity, which may be operated from ground, pavement or floor surfaces.

Work applications may include but are not limited to:      Elevating work platforms include but are not limited to:

- painting
  - erecting signs
  - fixing steelwork
  - minor repair work to buildings
- scissor type
  - extending arm (cherry picker)

OH&S requirements to be in accordance with Statutory legislation and regulations and may include:

- operation of mechanical equipment
- protective clothing and equipment
- worksite environment and safety
- handling of materials
- emergency procedures

Personal protective equipment may include:

- coveralls
- safety boots
- hard hat/cap
- gloves
- safety glasses/goggles
- ear plugs/muffs
- dust masks/respirator

Safety hazards may include but are not limited to:

- obstacles in pathway or on face of walls
- limited space
- other activities within vicinity
- weather conditions

Work is to be undertaken in a team situation under supervision where instructions would be part of supervisor's directions. Instructions and reporting of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by the safe and effective operation of any of the EWP's listed within the range of variables statement relevant to the work orientation.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- show compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to, during and after use of elevating work platform
- demonstrate safe and effective operational use of plant, tools and equipment
- demonstrate safe and effective work application while in set elevated position
- interactively communicate with others to ensure safe and effective workplace operations

### (2) Pre-requisite Relationship of Units

Competency in this unit may be determined concurrently with other units relevant to the work orientation, based upon integrated project work.

Pre-requisites for this unit are:

- BCGCOR0011A      Carry out OH&S requirements
- BCGCOR0051A      Use hand and power tools
- BCGCOR0061A      Use small plant and equipment

### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- workplace and equipment safety requirements relative to EWP's
- a range of EWP's
- operation and maintenance of equipment
- use of hand and power tools
- drawings and specifications
- communication processes – verbal and signalling
- materials and material fixing

#### Skills

The ability to:

- work safely to instructions
- interpret drawings and specifications
- use hand tools
- use plant and equipment
- fix materials
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- appropriate elevating work platform
- plant and equipment appropriate to EWP
- hand tools and materials appropriate to work application from EWP
- suitable work area appropriate to operation of EWP
- appropriate operation and manufacturer's specification manual

**(5) Method of Assessment**

Competency shall be assessed while work is carried out under direct supervision with regular checks, but may include some autonomy when working as part of a team.

Assessment should be by direct observation of tasks and questioning related to underpinning knowledge.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>• Carries out established processes</li> <li>• Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Manages process</li> <li>• Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes principles and procedures</li> <li>• Evaluates and reshapes process</li> <li>• Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guide lines for advice on how to use the Critical Employability Skills.

**BCGMAS0292A: Carry out concrete work**

## Competency Descriptor:

This unit deals with the skills and knowledge required to effectively handle, place and compact concrete, and applies to individuals working in the construction industry.

## Competency Field:

General Construction

**ELEMENT OF COMPETENCY PERFORMANCE CRITERIA**

- | <b>ELEMENT OF COMPETENCY</b>    | <b>PERFORMANCE CRITERIA</b>   |
|---------------------------------|---|
| 1. Plan and prepare work        | <ul style="list-style-type: none"> <li>1.1 Quality Assurance requirements for company's concrete operations recognised and adhered to.</li> <li>1.2 OH&amp;S requirements with application tasks and workplace environment recognised and adhered to, including identification of hazardous material.</li> <li>1.3 Appropriate personal protective equipment selected, correctly fitted and used.</li> <li>1.4 Tools and equipment selected, to carry out processes consistent with job requirements, checked for serviceability and any faults reported to supervisor.</li> <li>1.5 Procedures and the individual's role are identified through the supervisor in team operation to place concrete.</li> </ul> |
| 2. Carry out concrete placement | <ul style="list-style-type: none"> <li>2.1 Assistance provided with the undertaking of relevant concrete tests.</li> <li>2.2 Concrete transported correctly and safely with wheelbarrow and discharged into formwork using correct manual handling techniques.</li> <li>2.3 Concrete placed to instruction, minimising spillage.</li> <li>2.4 Concrete compacted to specification and instruction using immersion vibrator or other specified method.</li> <li>2.5 Concrete screeded to specified levels/grades as per instructions.</li> <li>2.6 Concrete finished to instruction to specified surface finish.</li> <li>2.7 Curing process identified and applied to instruction.</li> </ul>                   |

- |                  |     |   |
|------------------|-----|---|
|                  | 2.8 | Concrete surface adequately covered with appropriate material to support curing process and protect it from damage. |
| 3. Clean up site | 3.1 | Site cleaned free of debris.  |
|                  | 3.2 | Waste and unwanted material disposed of safely.   |
|                  | 3.3 | Tools and equipment cleaned, maintained and stored.   |

## RANGE STATEMENT

This unit applies to manual handling and placing of concrete.

Work is undertaken as part of a team under supervision.

Quality Assurance requirements may include:

- workplace operations and work procedures
- quality of material
- control of placement, compaction and finish of concrete
- use and maintenance of tools, plant and equipment
- specifications of work

Tools and equipment may include:

- shovels and rakes
- wooden floats
- steel floats
- bull floats
- immersion vibrator or vibrating table
- tarpaulins/covers
- curing agent applicator
- steam generator
- wheelbarrow
- tamping rods
- screed boards
- edging tool
- brooms

Concrete work includes placement of concrete onto:

- foundation
- slab on
- simple retaining walls

Concrete may be cured by:

- atmospheric conditions
- applied moisture
- applied agents

Waste material and debris may include:

- concrete spillage
- excess concrete
- pieces of timber
- empty containers
- cardboard and paper

Personal protective equipment may include:

- safety goggles/glasses
- respirators
- ear muffs and safety boots
- boots
- water proof pants and jacket

Concrete may be transported to formwork and placed by the following methods:

- directly from pre-mix truck
- wheelbarrow
- buckets
- manually

Concrete may be finished by:

- steel float
- bull floats
- wood float
- broom

Instructions would be part of supervisor's directions. Instructions and reporting of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by the safe and effective placement and finish of concrete using any of the conditions and types of structures listed within the range of variables statement, relevant to the work orientation.

### (1) Critical Aspects and Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to concrete work and workplace operations
- show compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during application of concreting process
- demonstrate safe and effective operational use of tools, plant and equipment
- interactively communicate to support team and ensure safe and effective workplace operations
- give particular attention to placement and compaction processes



**(2) Pre-requisite Relationship of Units**

Competency in this unit may be determined concurrently, based upon integrated project work using the following units of competence:

- BCGCAR0252A Erect and strip formwork for concrete work
- BCGSTW0262A Carry out steel-fixing

Pre-requisites for this unit in addition to BCGCAR0252A and BCGSTW0262A are:

- BCGCOR0011A Carry out OH&S requirements
- BCGCOR0051A Use hand and power tools
- BCGCOR0061A Use small plant and equipment
- BCGMAS0101A Carry out concrete work to simple forms

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- concrete construction
- hand tools and equipment
- materials relating to the concreting process
- materials handling
- measurement relevant to concrete work
- drawings/specifications
- transporting, placing concrete
- levelling equipment
- simple formwork and reinforcement component

Skills

The ability to:

- work safely to instructions
- use power tools and hand tools
- handle materials
- select equipment appropriate to concreting process
- measure relative to concreting process
- communicate effectively
- use simple levelling equipment

**(4) Resource Implications**

The following resources should be made available:

- hand tools and power tools appropriate to concreting process
- plant and equipment appropriate to concreting process
- suitable formwork with placed reinforcement appropriate to concreting process
- concrete testing equipment

**(5) Method of Assessment**

Competency shall be assessed while work is being done under direct supervision with regular checks, but may include some autonomy when working as part of a team, in order to achieve outcomes within time constraints.

Assessment should be by direct observation of tasks and questioning related to underpinning knowledge.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of the process.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace environment in accordance with work practices and safety procedures.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## BCGCAR0302A: Remove/replace door and window hardware

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively identify, remove and replace doors and windows hardware, and applies to individuals working in carpentry/joinery trades in the construction industry.

Competency Field:

General Construction

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1.	Plan and prepare work	1.1	Quality Assurance requirements recognised and adhered to.
		1.2	Occupational Health & Safety requirements for removing and replacing door/window hardware recognised and adhered to.
		1.3	Door and window hardware requirements assessed in accordance with finish schedule and specifications.
		1.4	Personal protective equipment selected, correctly fitted and used.
		1.5	Tools and equipment selected consistent with job requirements, checked for serviceability and any faults reported.
		1.6	Safety hazards identified and correct procedures used to reduce hazards to self and others.
2.	Remove doors, shutters and hardware	2.1	Ladders or scaffolding erected, where required, to OH&S regulations.
		2.2	Insect screens and fittings carefully removed and stored safely.
		2.3	Window hardware carefully located and removed and or stored safely.
		2.4	Window shutters and sashes, where applicable and practical, carefully removed and handled safely to designated location for finishing.
		2.5	Door hardware carefully removed and located or stored safely.

		2.6	Doors carefully removed, identified and handled safely to location for finishing.
3.	Replace doors, shutters and hardware	3.1	Doors carefully handled and replaced back in original place.
		3.2	Door hardware fitted and placed to specifications without marking door or surrounds.
		3.3	Where removed, window shutters and sashes re-fixed in original place.
		3.4	Window hardware re-fitted back into place to specifications without marking window surfaces or surrounds.
		3.5	Insect screens carefully replaced and secured in position without damage to surrounds.
4.	Clean up	4.1	Area cleared.
		4.2	Tools and equipment cleaned, maintained and stored.

## RANGE STATEMENT

This unit applies to the practical application finishes to doors and windows that require removal or the removal of hardware.

Door hardware includes but not limited to:

- hinges
- locks
- latches
- handles
- closers
- safety chains

Window hardware includes:

- catches
- handles
- stays
- hinges
- locks/bolts
- brackets

Hinges and brackets may be the type to be painted over or kept in own natural finished state.

## EVIDENCE GUIDE

Competency is to be demonstrated by removing hardware from both a nominated door and a nominated window for the purpose of painting, replacing and refitting doors/shutters, where applicable.

**(1) Critical Aspects of Evidence**

It is essential that competence be observed in the following aspects:

- compliance with Occupational Health and Safety regulations applicable to workplace operations
- compliance with organisational quality procedures and processes for removing and/or painting of doors and windows
- identification of location and details of door and window to be removed/refurbished
- selection and use of appropriate processes, tools and equipment
- safe and effective procedures used to remove hardware and door
- appropriate attention given to locating hardware safely for replacing
- safe and effective procedures used to replace door and replace respective hardware
- identification of typical faults and problems that occur and necessary action taken to rectify them

**(2) Pre-requisite Relationship of Units**

- BCGCOR0051A Use hand and power tools

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- features of doors and windows
- door and window hardware
- tools and equipment

Skills

The ability to:

- work safely
- organise work
- use tools and equipment

**(4) Resource Implications**

The following resources should be made available:

- installed door
- installed window
- insect screen
- appropriate door and window hardware

**(5) Method of Assessment**

Competency should be assessed while tasks are being done under indirect supervision.

Assessment may involve:

- observation of the application process
- inspection of the completed work
- questioning related to underpinning knowledge

**(6) Context of Assessment**

Competency should be assessed in the normal or simulated workplace environment.

Assessment should be while tasks are being done, under indirect supervision.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>• Carries out established processes</li> <li>• Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Manages process</li> <li>• Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes principles and procedures</li> <li>• Evaluates and reshapes process</li> <li>• Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 3	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level -	
Use mathematical ideas and techniques	Level -	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGCAR0312A: Use static machines**

## Competency Descriptor:

This unit deals with the skills and knowledge required to effectively prepare and use various types of static machines, and applies to individuals working with carpentry/joinery/masonry/ancillary equipment in the construction industry.

## Competency Field:

General Construction

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1.	Identify static machines, their operation and safety requirements	1.1	Types and functions of static machines used in offsite production identified.
		1.2	Method of operation for `machines identified and understood.
		1.3	Occupational Health and Safety (OH&S) requirements for guarding and switches identified.
		1.4	Occupational Health and Safety (OH&S) requirements for personal protective equipment associated with using machines identified.
		1.5	Quality Assurance requirements of company's machining operations recognised and adhered to.
2.	Prepare machine for use	2.1	OH&S requirements for preparing and using static machines recognised and adhered to.
		2.2	Appropriate personal protective equipment selected, correctly fitted and used.
		2.3	Machine set up to required operating process and setting with fences/guides locked in position.
		2.4	Safety guards/shields checked and adjusted where required according to the National OH&S standards.

- |    |                                  |     |  |
|----|----------------------------------|-----|--|
| 3. | Operate machine                  | 3.1 | Machine start up procedure is carried out to manufacturer's recommendations.   |
|    |                                  | 3.2 | Material fed to machine, where applicable, in accordance with manufacturer's recommendations and safe handling procedures.                             |
|    |                                  | 3.3 | Material set up and fixed in place, where applicable for mobile machine in moving table operations, in accordance with manufacturer's recommendations. |
|    |                                  | 3.4 | Machine operated in accordance with designed capacity and purpose, and to manufacturer's specifications and OH&S requirements.                         |
|    |                                  | 3.5 | Machine shut down procedure carried out to manufacturer's recommendations.   |
| 4. | Maintain machine and attachments | 4.1 | Machines maintained through regular servicing to manufacturer's operating manual.  |
|    |                                  | 4.2 | Faults identified and reported to responsible supervisor.  |
|    |                                  | 4.3 | Minor faults identified and corrected where applicable.  |
|    |                                  | 4.4 | Cutters/blades and attachments fitted and secured to manufacturer's specifications.  |
| 5. | Clean up                         | 5.1 | Machine cleaned and waste material disposed of safely.   |
|    |                                  | 5.2 | Cutters, blades and attachments cleaned, checked and stored.   |



## RANGE STATEMENT

This unit applies to the use of static machines, which are those affixed to a set location for their operation.

OH&S requirements to be in accordance with Statutory and Regulations and may include:

Static machines include but are not limited to:

- rip saws
- band saws
- docking saws
- vertical and horizontal drills
- dimensional saws
- thicknessers
- buzzers
- spindle moulders
- morticers
- multi borers
- table sanders
- grinders
- polishers
- multi functional cutter/grinder/polisher
- shapers
- diamond saws
- travelling beam saws
- multi bladed saws

Quality assurance requirements may include:

- workplace operations and procedures
- quality of materials used in machining operations
- control of handling procedures
- use and maintenance of machines
- attention to specifications of work
- workplace environment and safety
- protective clothing and equipment
- safety switches on machinery
- maintenance of machines
- use of tools and equipment
- handling and feeding of materials
- guarding on machinery
- safe use of machines

Personal protective equipment may include:

- boots
- safety glasses/goggles
- ear plugs/muffs
- dust masks/respirators
- gloves
- cap

Tools and equipment for maintenance and setting up may include but are not limited to:

- oil cans
- grease guns
- spanners
- feeler gauges
- packers
- wedges
- screwdrivers
- measuring tape/rule
- hammer
- spirit level
- squares

Reporting of faults should be in accordance with organisation's workplace procedures and may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by the safe and efficient setting up and operating of at least three (3) separate types of machines from those listed in the range of variables statement.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace and machine operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements within the context of carrying out machining operations
- identify and appropriately apply manufacturer's recommendations in use of machine
- identify and correctly apply machine guard in operating machine
- carry out correct setting up procedures prior to use in accordance with carrying out machine operations
- carry out correct start up procedures
- demonstrate safe and effective operational use of machine
- carry out correct shut down/switch off procedures
- give attention to procedures for cleaning and maintaining of machine to requirements
- use of safe and correct procedures to place or remove cutters and blades

### (2) Prerequisite Relationship of Units

- BCGCOR0051A Use hand and power tools
- BCGCOR0061A Use small plant and equipment

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements including relevant statutory regulations
- types of machines and their operation
- safety considerations for operating of machinery
- maintenance of machines
- cutter, blades and associated accessories
- tools and equipment
- materials
- materials handling

Skills

The ability to:

- work safely to instructions
- set up for machine operation
- operate machine
- use hand tools and equipment
- handle material
- stack material
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- workshop location
- access to a range of static machines
- materials appropriate to work orientation machinery

**(5) Method of Assessment**

Competency should be assessed while work is being done under direct supervision.

Assessment may involve:

- observation of application work
- questioning related to underpinning knowledge

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of each task associated with setting up and using machine.

**(6) Context of Assessment**

Competency should be assessed in the normal or simulated workplace environment in accordance with work and safety procedures.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level -	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGCAR0322A: Make set-outs**

## Competency Descriptor:

This unit deals with the skills and knowledge required to effectively perform the tasks of setting out dimensions of work, and applies to individuals working in marking out standard or basic units of stock material in the production of components for construction.

## Competency Field:

General Construction

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1.	Plan and prepare for set -out	1.1	Quality Assurance requirements of company's construction operations recognised and adhered to.
		1.2	Occupational Health and Safety (OH&S) requirements determined and adhered to in accordance with application tasks and workplace environment.
		1.3	Design and dimensions of unit determined from written instructions and drawings.
		1.4	Type of set-out to be undertaken, is determined.
		1.5	Material selected consistent with set-out requirements and prepared for marking.
		1.6	Tools and instruments selected to carry out processes consistent with set-out requirements.
2.	Make set-out for unit	2.1	Overall dimensions of unit and lines representing material thickness accurately marked on set -out.
		2.2	Details of cross-sectional dimensions of integral members accurately marked on set-out, where applicable.
		2.3	Methods of joining marked on set -out where applicable.
		2.4	Set-out of cross-sectional members of profiles cut accurately to form template shapes where applicable.
		2.5	Set-out identified by marking description/code of unit on completed set-out.

- |    |               |     |  |
|----|---------------|-----|--|
| 3. | Store set-out | 3.1 | Set-out stored in identifiable and retrievable location. |
|    |               | 3.2 | Area cleared and waste removed.                          |
|    |               | 3.3 | Tools and instruments cleaned and stored.                |

## RANGE STATEMENT

This unit applies to the making of set -outs to produce a product in accordance with the relevant work orientation.

Units to be set out are to be standard or basic type units of stock material produced by an organisation in any of the following production areas:

- timber joinery
- aluminium joinery
- fitments
- shop-fronts
- stairs
- stonework
- glasswork
- pre-cast concrete work

Set-outs include:

- full size dimensional illustrations
- full size sectional plans and elevations
- profiles of sections
- machining details
- lettering or decorative features

Quality assurance requirements may include:

- workplace operations and procedures
- attention to specifications of work
- making of set outs and templates

OH&S requirements to be in accordance with Statutory Legislation and regulations and may include:

- workplace environment and safety procedures
- protective clothing and equipment
- use of tools and equipment
- handling of materials

Tools and instruments may include but are not limited to:

- measuring tape/ruler
- squares
- scribes
- dividers/steel wing compasses
- straight edge
- curved templates
- set squares
- T-squares

Written instructions and drawings include:

- elevation and plan drawings
- provided specifications
- isometric drawings
- sketches
- typed or hand written notes
- verbal instructions

Material for set -out include:

- plywood
- particle board
- paper
- cardboard
- zinc sheet
- aluminium sheet
- plastic sheet

Preparation of material for set -out include:

- cutting sheet material to practical size
- taping paper to backing base
- sanding off previous set-out or marks

## EVIDENCE GUIDE

Competency is to be demonstrated by making a set -out complete and accurate in detail whereby from which all parts/components of a unit can be produced and marked.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures including Quality Assurance requirements within the context of making set -outs
- indicate understanding of interpreting drawings and instructions
- select and use appropriate processes, tools and instruments for set -out task
- accurately set-out detailed information
- demonstrate correct use of instruments and tools in setting out angles and curves
- demonstrate accurate cutting of set-out shape, where applicable

### (2) Prerequisite Relationship of Units

- BCGCOR0031A Draw and interpret simple drawings
- BCGCOR0041A Carry out measurements and calculations

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- working drawings and specifications
- set outs relevant to work orientation
- measuring and marking
- use of drawing/drafting equipment
- organisation's Quality Assurance requirements
- manufacturing processes
- tools and instruments
- set-out materials

Skills

The ability to:

- understand and interpret information from drawings and instructions
- use basic instruments and tools
- prepare for work application
- apply sound measuring and marking techniques
- set-out material
- record or mark identifying information
- communicate effectively

**(4) Resource Implications**

The following resources should be made available:

- workplace space to carry out processes
- set-out bench and set-out materials
- measuring and marking instruments
- tools and equipment for holding and cutting

**(5) Method of Assessment**

Competency should be assessed while work is being done under indirect supervision.

Assessment may be by intermittent checking at the various stages of the job application in accordance with the performance criteria, or may be at the completion of the set-out process.

**(6) Context of Assessment**

Competency should be assessed in the normal or simulated workplace environment and in accordance with work and safety procedures.

Guidelines will be in line with statutory agreements and specific policies and procedures.



## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level -	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 1	
Use technology	Level -	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

## BCGMAS1242A: Apply solid render

### Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and apply cement mortar to render masonry structures, and applies to individuals working in masonry in the building construction industry.

### Competency Field:

General Construction

ELEMENT OF COMPETENCY	PERFORMANCE CRITERIA
1 Plan and prepare work	1.1 Quality Assurance requirements of company's construction operations recognised and adhered to. 1.2 OH&S requirements for the workplace environment and preparing for and applying solid render recognised and adhered to. 1.3 Area to receive solid render determined from job drawings. 1.4 Correct mix for solid render determined from job specifications. 1.5 Materials and required quantities calculated from job drawings and specifications. 1.6 Appropriate personal protective equipment selected, correctly fitted and used. 1.7 Tools and equipment selected consistent with requirements for applying solid render to flat surfaces, checked for serviceability and any faults reported to supervisor.
2 Prepare surface area	2.1 Scaffolding erected in accordance with job requirements and OH&S regulations. 2.2 Surface area to be rendered prepared in accordance with job specifications. 2.3 Dash coat mixed and applied liberally to wetted surface.
3 Mix materials for solid/render	3.1 Mortar for render mixed to designed proportion and consistency in accordance with the job specifications.

- |   |                      |  |
|---|----------------------|--|
|   | 3.2                  | Render coat dotted and lined (screeded) to plumb or level tolerance of +/- 2mm over 2.4 metres.  |
| 4 | Apply render         | <p>4.1 Render applied to dried splash, dotted and lined surface and screeded to correct thickness in accordance with job drawings and specifications.</p> <p>4.2 Screeded solid render trowelled to specify surface according to job finishes schedule.</p> <p>4.3 Surface finished plumb/level and to an alignment tolerance of +/-2mm over 3 metres.</p> |
| 5 | Cure applied surface | 5.1 Finished surface cured using curing method in accordance with the job requirements and architect's specifications.   |
| 6 | Clean up             | <p>6.1 Work area cleared.</p> <p>6.2 Waste materials removed from job area and placed into job waste bins or rubbish stockpile.</p> <p>6.3 Unused materials stored.</p> <p>6.4 Tools and equipment cleaned, maintained and stored.</p>   |

## RANGE STATEMENT

This unit applies to the application of one or two -coat cement mortar render to masonry or concrete surfaces.

Render mix to be in accordance with specification.

Quality Assurance requirements may include:

- workplace operations and procedures
- quality of materials
- control of handling procedures
- use and maintenance of equipment
- attention to specifications of work

OH&S requirements to be in accordance with Statutory Legislation and Regulations and may include:

- workplace environment and safety
- fall safe protection
- protective clothing and equipment
- use of tools and equipment
- handling of materials
- working platforms and scaffolding

Application may be to horizontal or vertical surfaces.

Background surfaces for application include:

- concrete
- concrete block-work
- brickwork
- stonework
- timber or metal lathing

Cleaning of surfaces may involve:

- wire brushing
- grinding
- chipping
- washing down

Dash coat may be applied using:

- trowel
- brush
- nozzle spray

Personal protective equipment may include:

- boots
- safety glasses/goggles
- ear plugs/muffs
- dust masks/respirators
- gloves
- cap

Tools and equipment may include but are not limited to:

- measuring tape/rule
- trowels
- brushes
- screed boards
- scaffolding
- straight edges
- grinder
- concrete mixer
- mortar boards and stands
- shovel
- wheelbarrows
- hawks
- joint rules
- small tools
- plumb bob
- masons square
- buckets
- sieve
- power leads

Reporting of faults should be in accordance with company's workplace procedures and may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by applying solid render to either brick, block or concrete background surfaces.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspect s:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace and solid plastering operations
- display compliance with organisational policies and procedures
- select and use appropriate processes, tools and equipment
- apply organisational quality procedures and processes within context of applying solid plastering
- locate surfaces and inspect for bonding requirements prior to application of splash coat or render or set coat
- prepare render mix to architect's specification and
- finish reveals and returns square to surface
- employ safe and efficient techniques in the use of tools and equipment
- identify faults and problems that occur and necessary action taken to rectify
- finish surface plumb/level to tolerance of +/-2mm over 2.4 metres
- interactively communicate with others to ensure safe and effective work procedures

### (2) Pre-requisite Relationship of Units

- BCGCOR0051A Use hand and power tools
- BCGCOR0081A Use simple levelling devices
- BCGCOR0212A Prepare surfaces
- BCGCOR0242A Carry out levelling

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- drawings and specifications
- mix composition
- render and rough cast
- additives including plasticisers, colour and waterproofing agents
- Building Code of Jamaica and relevant Standard
- materials
- tools and equipment
- calculation of material quantities

Skills

The ability to:

- work safely
- select and handle material safely
- organise work
- interpret drawings and specifications
- interpret documentation from a wide range of sources
- set out work
- use tools and equipment
- communicate effectively

**(4) Resource Implications**

The following resources should be provided:

- workplace location
- tools, plant and equipment suitable for applying cement rendering coats to flat surface
- scaffolding
- appropriate materials

**(5) Method of Assessment**

Competency should be assessed through direct observation of the application process and questions related to underpinning knowledge.

Assessment should be conducted while tasks are undertaken either individually or as part of a team under limited supervision.

**(6) Context of Assessment**

Competency may be assessed in the workplace or simulated workplace setting.

Assessment should be while tasks are undertaken either individually or as part of a team under limited supervision.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGPAD1332A: Apply wallpaper**

## Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and hang wallpaper and other wall-coverings, and applies to individuals working in interior decoration of surface structure.

## Competency Field:

General Construction and Interior Decoration

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1.	Select and prepare materials and equipment	1.1	Quality Assurance requirements for company's painting and decorating operations recognised and adhered to.
		1.2	Occupational Health & Safety (OH&S) requirements for workplace environment and preparing for and the application of wallpaper identified and adhered to.
		1.3	Materials checked for conformity with specifications.
		1.4	Appropriate personal protective equipment selected, correctly fitted and used in accordance with safe working conditions.
		1.5	Tools and equipment selected consistent with job requirements, checked for serviceability and any faults reported and/or rectified.
		1.6	Safety hazards identified and correct procedures used to reduce risk to self and others.
2.	Erect work platform	2.1	Work platform erected to appropriate working height to job and Occupational Health & Safety requirements.
3.	Prepare surface and wallpaper	3.1	Surface prepared as per manufacturer's specification in compliance with substrate requirements.
		3.2	Surface defects repaired to an even, sound finish and lining paper applied where required to achieve a clean, even finish.
		3.3	Application plan determined and paper selected to specification or client requirements.
		3.4	Adhesives selected as per wallpaper manufacturer's specification where applicable.
		3.5	Wallpaper checked for defects and shading problems and rectified where applicable.
		3.6	Size applied to surface where applicable to manufacturer's specifications.



4	Apply wallpaper	4.1	Wallpaper applied to manufacturer's specifications ensuring seams are butted, paper is plumb, pattern is matched (if applicable), free of defects and trimming around fittings is precise.
5.	Clean-up	5.1	Area cleaned and waste material disposed of safely.
		5.2	Unused materials stored.
		5.3	Tools and equipment safely cleaned, maintained and stored.

## RANGE STATEMENT

This unit applies to the application of a range of wallpaper and selected wall coverings to all common interior building substrates.

Application to walls and ceilings constructed of the following materials: (painted/previously painted in sound and unsound condition)

- set plaster
- paper-faced gypsum plaster board
- plaster glass
- masonry products (including clay bricks, concrete blocks, in-situ concrete, cement render)
- medium density fibre-board (MDF) and particle board
- fibre-cement products
- polystyrene

Tools and equipment may include but not limited to:

- lay brush
- smoothing block
- plastic spreader
- plastic trowel
- rubber roller
- scissors
- sponge
- seam roller trimming knives and cutters
- broad knife
- tape measure
- plumb bob and string line
- spirit level
- scrapers
- filling blades
- putty knives

Adhesives may include but not limited to:

- cellulose
- starch
- PVA
- latex
- special blends as per manufacturer's recommendation

Wall covering materials may include:

- unpasted and ready-pasted wallpapers (simplex and duplex)
- washable wallpaper
- vinyl wallpaper
- lining paper
- suede grass weaves
- photomurals
- lyncrusta
- flock
- metallic foils
- front runner
- anaglypta
- borders
- 1350 mm wide linen-backed vinyl
- commercial grade materials

Elevated work platforms to include:

- step ladder
- trestles and plank
- mobile scaffolding

## EVIDENCE GUIDE

Competency is to be demonstrated by the application of a range of wall coverings to a range of substrates to manufacturer and architect/client specifications.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace and wallpaper application operations
- indicate compliance with organisational policies and procedures
- select and use appropriate process, tools and equipment
- apply organisational quality procedures and processes within context of applying wallpaper
- carry out adequate surface preparation to ensure maximum adhesion of wallpaper
- use safe and effective procedures to apply standard width and commercial width wall coverings to ceilings, walls, partitions, archways
- calculate quantities of materials
- identify faults and problems that occur and corrective action taken to rectify

### (2) Pre-requisite Relationship of Units

Pre-requisites for this unit are:

- BCGCOR0081A Use simple levelling devices
- BCGCOR0061A Use plant and equipment
- BCGCOR0212A Prepare surfaces

This unit may be assessed concurrently with:

- BCGPAD0191A Prepare for construction process (painting and decorating)
- BCGCOR0212A Prepare surfaces
- BCGPAD1322A Prepare surfaces for painting and decorating

### (3) Underpinning Knowledge and Skills

#### Knowledge

##### Knowledge of:

- workplace and equipment safety requirements
- specifications
- surface preparation for the application of wallpaper
- compatibility of preparatory materials and wallpaper

#### Skills

##### The ability to:

- work safely, efficiently and effectively
- organise/plan work
- interpret specifications
- take off dimensions, quantities, types of materials, application requirements
- identify and select materials appropriate to job

**Underpinning Knowledge and Skills (Cont'd.)**Knowledge

Knowledge of:

- types and properties of wall coverings and their suitability to various substrates
- hazards associated with wallpaper, chemicals and dust
- tools and equipment
- procedures used to apply straight pattern match, drop pattern match and random match wallpapers
- procedures used to apply commercial width and special purpose wall coverings
- responsibilities with regard to:
  - heritage listed buildings
  - conservation areas
  - environmental requirements
  - calculate quantities of materials

Skills

The ability to:

- use tools, equipment and materials
- prepare materials
- apply wall coverings to manufacturer's specification and quality standards
- check finished work
- communicate effectively
- clean area and dispose of waste safely
- store materials/components
- respond to emergency situations
- calculate material quantities

**(4) Resource Implications**

The following resources should be provided:

- workplace location
- tools and equipment appropriate to processes
- materials appropriate to activity
- specifications of proposed activity

**(5) Method of Assessment**

Competency should be assessed through direct observation and questions related to underpinning knowledge.

Competency will be assessed under general guidance, checking at various stages of the process and at completion of the activity against performance criteria and specifications.

**(6) Context of Assessment**

Competency will be assessed in the workplace or simulated workplace setting.

Assessment should be while tasks are undertaken either individually or as part of a team under limited supervision.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level -	
Plan and organise activities	Level 3	
Work with others and in team	Level 2	
Use mathematical ideas and techniques	Level 3	
Solve problems	Level 2	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BSBSBM0012A: Craft personal entrepreneurial strategy**

## Competency Descriptor:

This unit deals with the skills and knowledge required to craft an entrepreneurial strategy that fits with the attitudes, behaviours, management competencies and experience necessary for entrepreneurs to meet the requirements and demands of a specific opportunity.

Competency Field: Small Business Operations

**ELEMENT OF COMPETENCY PERFORMANCE CRITERIA**

1. Demonstrate knowledge of the nature of entrepreneurship	1.1	Concepts associated with entrepreneurship are clearly defined.
	1.2	Factors which influence entrepreneurship in and outside of Jamaica are correctly identified and explained.
	1.3	The importance of entrepreneurship to economic development and employment is explained clearly.
	1.4	The findings of research conducted on entrepreneurial ventures and successes in the Caribbean region are clearly presented in an appropriate format.
	1.5	Differences between wage employment and entrepreneurial ventures are correctly stated.
2. Identify and assess entrepreneurial characteristics	2.1	Relevant research is carried out and required entrepreneurial characteristics identified.
	2.2	Entrepreneurial characteristics identified are assessed and ranked.
	2.3	An understanding of the process and discipline that enable an individual to evaluate and shape choices and to initiate effective action is correctly demonstrated.
	2.4	Factors that will help an entrepreneur to manage the risk and uncertainties of the future, while maintaining a future orientated frame of mind, are identified.

- 3. Develop self-assessment profile
  - 3.1 Self-assessment tools/methods to identify personal entrepreneurial potential are identified and properly used.
  - 3.2 The ability to apply creativity, problem-solving techniques and principles to solve business related problems are demonstrated.
  - 3.3 Feedback from others for the purpose of becoming aware of blind spots and for reinforcing or changing existing perceptions of strengths/ weaknesses is appropriately obtained.
  
- 4. Craft an entrepreneurial strategy
  - 4.1 A profile of the past that includes accomplishments and preferences in terms of life and work styles, coupled with a look into the future and an identification of what one would like to do is developed.
  - 4.2 Commitment, determination and perseverance; orientation towards goals; taking initiative and accepting personal responsibility; recognizing management competencies and identifying areas for development are determined.
  - 4.3 Written guidelines to obtain feedback that is solicited, honest, straightforward, and helpful but not all positive or negative are developed to facilitate reviews.
  - 4.4 Framework and process for setting goals which demand time, self-discipline, commitment, dedication and practice are developed.
  - 4.5 Goals established are specific and concrete, measurable, relate to time, realistic and attainable.
  - 4.6 Priorities, including identifying conflicts and trade-offs and how these may be resolved are established.
  - 4.7 Potential problems, obstacles and risks in meeting goals are identified.
  - 4.8 Specified action steps that are to be performed in order to accomplish goals are identified.
  - 4.9 The method by which results will be measured is indicated.

- 4.10 Milestones for reviewing progress and tying these to specific dates on a calendar are established.
- 4.11 Sources of help to obtain resources are identified.
- 4.12 Evidence of the ability to review process and periodically revise goals is demonstrated.

## RANGE STATEMENT

At this stage of the entrepreneurial process the entrepreneur must be able to conduct a self-assessment profile, examine the frame work for self assessment, develop a personal entrepreneurial strategy, identify data to be collected in the self-assessment process and learn about receiving feedback and setting goals.

Concepts associated to include:

- risk
- entrepreneurship
- macro-screening
- micro-screening
- competition
- wage employment

Influencing factors to include:

- market conditions
- markets – demand/supply
- global trends
- level of economic activities
- funding
- economic stability
- social stability
- resources availability

The entrepreneur must be able to:

- understand the extreme complexity in predicting or aligning him/herself to specific careers in an environment of constant change
- determine the kind of entrepreneur he or she wants to become based on attitudes, behaviours, competencies, experience and how these fit with the requirements and demands for a specific opportunity
- evaluate thoroughly his or her attraction to entrepreneurship
- effectively develop personal plan
- utilize available information that will enhance his or her ability to achieve success

The entrepreneur may encounter setbacks if the planning process is not effectively pursued.

Pitfalls may include:

- proceeding without effective planning which may result in commitment to uncertainty
- commitment to a premature path with the desirability of flexibility can lead to disaster
- personal plans fail for the same reasons as business plans including frustration if the plan appears not to be working immediately and the challenges of changing behaviour from an activity-oriented routine to one that is goal oriented
- developing plans that fail to anticipate obstacles, and those that lack progress milestones and reviews

## EVIDENCE GUIDE

Competency is to be demonstrated when the entrepreneur is able to undertake a personal entrepreneurial assessment exercise to determine if he or she possesses the necessary credentials to be a successful entrepreneur. This stage of the entrepreneurial process is critical since experience has shown that the founder is one of the deciding forces if the venture is to succeed and prosper.

### (1) Critical Aspects of Evidence

The entrepreneur will be assessed by his/her action in developing an orchestrated plan in order to effectively pursue the business concept.

### (2) Pre-requisite Relationship of Units

- Nil



**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- personal entrepreneurial profile systems
- effective management systems: marketing, operations/productions, finance, administration, law
- how to measure feedback
- the method of developing a personal plan and a business plan
- understanding the difference between entrepreneurial culture and management culture

Skills

The ability to:

- determine barriers to entrepreneurship
- minimize exposure to risk
- exploit any available resource pool
- tailor reward systems to meet a particular situation
- effectively plan and execute activities
- use computer technology to undertake assessments

**(4) Resource Implications**

The following resources should be made available:

Personal computer with access to the internet and appropriate software that will enable one to conduct the necessary analysis using the internet

**(5) Method of Assessment**

A useful method of assessment is to determine if the venture can stand up to the test of critical evaluation.

**(6) Context of Assessment**

This stage of the entrepreneurial process is assessed when comparisons are made between actual outcomes and plans/projections.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGCAR0623A: Replace glass**

Competency Descriptor:

This unit deals with the skills and knowledge required to replace glass in framed areas, and applies to individuals engaged in the installation of glass in the building construction industry.

Competency Field:

General Construction

**ELEMENT OF COMPETENCY PERFORMANCE CRITERIA**

- |                          |   |
|--------------------------|---|
| 1. Plan and prepare work | 1.1 Quality Assurance requirements for company's construction operations recognised and adhered to.   |
|                          | 1.2 Occupational Health and Safety (OH&S) requirements for workplace environment and preparing for and replacing glass recognised and adhered to. |
|                          | 1.3 Materials checked against specifications or instructions in accordance with actual job.   |
|                          | 1.4 Appropriate personal protective equipment selected, correctly fitted and used.  |
|                          | 1.5 Tools and equipment selected to carry out processes consistent with job requirements and checked for serviceability.                          |
|                          | 1.6 Safety hazards identified and correct procedures used to minimise risk to self and others.  |
| 2. Remove damaged glass  | 2.1 Basic scaffolding or ladder set up to job and OH&S requirements, where applicable.  |
|                          | 2.2 Timber or metal beading, where applicable, carefully removed avoiding damage to bead or frame.  |
|                          | 2.3 Damaged glass safely removed from frame or sash and placed in waste container.  |
|                          | 2.4 Splayed putty, where applicable, carefully removed avoiding damage to frame and rebate.   |
|                          | 2.5 Rebate for glass cleaned free of any residue/pins/brads without damage.   |

- |                          |   |
|--------------------------|---|
| 3. Replace glass         | 3.1 Frame sanded and primer applied to rebate areas as specified.   |
|                          | 3.2 Where necessary new glass scored and snapped safely and correctly to accurate measurement with 4mm allowance.                   |
|                          | 3.3 Putty or silicone firmly applied to rebate and glass pressed in firmly and evenly into bedding.                                 |
|                          | 3.4 Glass fixed into place according to specification.  |
|                          | 3.5 Timber bead fixed securely to wooden frame or metal bead screwed securely to metal frame to designed finish, where applicable.  |
|                          | 3.6 Putty or silicone applied to fill and smoothed with a flat blade to an even splayed finish aligned to rebate, where applicable. |
|                          | 3.7 Excess putty or silicone carefully removed.   |
| 4. Repair surface finish | 4.1 Damaged surface/holes stopped off and surface sanded to finish.   |
|                          | 4.2 Where required paint surface repaired and finished to match existing colour within specified drying time.                       |
| 5. Clean up              | 5.1 Job and area cleaned.   |
|                          | 5.2 Waste and unwanted material disposed of safely.   |
|                          | 5.3 Tools and equipment cleaned, maintained and stored.   |

## RANGE STATEMENT

This unit applies to windows with wooden and metal frames and glass up to 4mm thickness.

Quality Assurance requirements may include:

- quality of materials
- handling and cleaning techniques
- installing of glass
- specification finish

Fixing and finishing of glass to frame may include:

- pins/brads and splayed putty
- timber bead nailed into place
- metal bead screwed into place

Tools and equipment may include but are not limited to:

- measuring tape/rule
- screwdrivers
- chisels
- glass cutters
- hammers
- putty knife
- brushes
- trestles
- plank
- straight edge
- hacking knife
- step ladders

OH&S requirements to be in accordance with Statutory Legislation and Regulations and may include:

- protective clothing and equipment
- working platforms
- handling of materials
- safety hazards

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- masks
- overalls

## EVIDENCE GUIDE

Competency is to be demonstrated by replacing the glass in a window frame or sash.

### (1) Critical Aspects of Evidence

It is essential that competence is observed in the following aspects:

- demonstrate compliance with OH&S regulations applicable to workplace operations
- apply organisational quality procedures and processes within the context of repairing windows
- identify location and details of waterproofing materials and application
- selection and use of appropriate processes, tools and equipment
- use safe and effective procedures to handle materials
- use safe and effective procedures to prepare frame for installation of glass
- identify typical faults and problems that occur and the necessary action taken to rectify
- interactively communicate with others to ensure safe and effective operations
- complete installation and finish of surface edges to specifications

### (2) Pre-requisite Relationship of Units

- BCGCOR0051A Use hand and power tools
- BCGCOR0111A Handle construction materials and waste
- BCGCAR0212A Prepare surfaces

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements including relevant statutory regulations,
- window and sash construction
- materials and characteristics
- methods of fixing glass
- tools and equipment
- fittings and fasteners
- ladders and basic scaffolding

Skills

The ability to:

- work safely
- organise work
- use tools and equipment
- work from ladders and elevated platforms
- measure and mark accurately
- cut glass
- fix beading
- communicate effectively

**(4) Resource Implications**

The following resources should be provided:

- workplace location
- tools and equipment appropriate to removal and installation processes
- appropriate materials for proposed activity
- specifications relative to proposed activity

**(5) Method of Assessment**

Competence should be assessed while tasks are undertaken.

Assessment may involve:

- observation of application process
- inspection of completed work
- questioning related to underpinning knowledge

Assessment may be by intermittent checking at various stages of each task application or at the completion of each task in accordance with the performance criteria.

**(6) Context of Assessment**

Competency may be assessed in the workplace or simulated workplace setting.

Assessment should be while tasks are undertaken either individually or working with a partner under indirect supervision.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 2	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGPAD0763A: Apply decorative finishes**

Competency Descriptor:

This unit deals with skills and knowledge required to prepare and apply decorative finishes, and applies to individuals engage in surface coating application.

Competency Field:

General Construction

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1.	Plan and prepare work	1.1	Quality Assurance requirements of company's painting and decorating operations recognised and adhered to.
		1.2	Occupational Health & Safety (OH&S) requirements for workplace environment, and preparation and application processes for decorative painted finish, identified and adhered to.
		1.3	Materials checked for conformity against specifications and finishes schedule.
		1.4	Appropriate personal protective equipment selected, correctly fitted and used.
		1.5	Tools and equipment selected consistent with job rectified/or requirements, checked for serviceability and faults reported to the appropriate person.
		1.6	Safety hazards identified and correct procedures used to reduce risk to self and others.
		1.7	Surfaces prepared in accordance with substrate requirements and specified decorative finish.
2.	Prepare application area	2.1	Area set up for application processes to suit area or units to be painted.
		2.2	Adequate ventilation ensured for application area.
		2.3	Measures taken to ensure dust free area and adequate lightening.
3.	Apply mirror paint finish	3.1	Paint viscosity adjusted to suit climatic conditions and method of application, where necessary.
		3.2	Prime and filled where necessary and intermediate coats applied to specification, allowed to dry thoroughly and then water sanded to a smooth even finish.
		3.3	Final coat applied without imperfections, flowing out to an even, smooth finish.
4.	Apply broken colour effects	4.1	Ground coat to specified colour and consistency applied evenly to prepared surface.
		4.2	Apply scumble glaze to prepared ground and produce desired broken colour effect to match sample.
		4.3	Clear coating, where required, applied to achieve an even finish to specified sheen/gloss level.
5.	Produce imitation marble effects	5.1	Ground coat to specified colour and consistency applied evenly to prepared surface.
		5.2	Marbling medium mixed to designed proportions and colour and correctly applied to produce veins and markings as per sample.



- |   |      |  |
|---|------|--|
|   | 5.3  | Clear coating applied to achieve an even finish to specified sheen level.  |
| 6. Produce imitation wood grain effects | 6.1  | Ground coat to specified colour and consistency applied evenly to prepared surface.  |
|   | 6.2  | Wood graining medium mixed to designed proportions and colour and correctly applied to produce grain markings as per sample.     |
|   | 6.3  | Specific highlights added to match sample (if applicable).   |
|   | 6.4  | Clear coating applied to achieve an even finish to specified sheen level.  |
| 7. Produce gilded finish                | 7.1  | Whiting applied evenly to background.  |
|   | 7.2  | Correctly mixed gold size applied evenly and without misses and allowed to dry to "whistle tack" stage.                          |
|   | 7.3  | Gold leaf transfer applied to background and wiped to produce a clean finish.  |
|   | 7.4  | Clear coating applied to protect gilding.  |
| 8. Apply colour fleck finishes          | 8.1  | Specified primer or base coat evenly sprayed onto a prepared surface.  |
|   | 8.2  | Colour fleck coating applied with spray gun as per manufacturer's specification.   |
|   | 8.3  | Glaze coat applied evenly to provide a uniform pattern and sheen level to specification.   |
| 9. Apply stencils                       | 9.1  | Suitable stencil design selected and laid out onto recommended material.   |
|   | 9.2  | Specified transfer method used and design cut accurately and repeated for multiple colours using a "register" mark.              |
|   | 9.3  | Initial stencil placed and taped to designed location and paint applied to produce first colour to specification.                |
|   | 9.4  | Subsequent stencils located accurately to pattern with each separate colour applied to specification to produce designed finish. |
| 10. Clean-up and store equipment        | 10.1 | Spray equipment dismantled, cleaned and maintained where applicable.   |
|   | 10.2 | Area cleaned and waste disposed of safely.   |
|   | 10.3 | Unused materials sealed and stored.  |
|   | 10.4 | Tools and equipment cleaned, maintained and stored.  |

## RANGE STATEMENT

This unit applies to the application of decorative painted finishes including mirror finishing, broken colour effects, imitation marbling, imitation wood graining, gilding, colour fleck and stencilling.

OH&S requirements may include but are not limited to:

- protective clothing
- protective equipment
- hazardous materials
- workplace conditions and isolating areas
- use of plant, equipment tools
- emergency procedures

Paint products may include:

- acrylic/latex grounds
- alkyd/oil grounds
- acrylic/latex scumble medium and associated products
- alkyd/natural oil scumble medium and associated products
- polyurethane, acrylic-latex, and natural oil glazes
- acrylic-latex and oil based washes
- solvent-borne (alkyd, urethane, urethane/alkyd, urethane oil or modified alkyd resins), latex (pva, pva/acrylic, acrylic and styrene acrylic)
- artist oils and water colours
- spraying enamels and acrylic lacquers

Tools and equipment may include but are not limited to:

- brushes
- rollers
- spray equipment
- sanders
- scrapers
- vacuum cleaner
- compressor
- trestles, planks, stepladders, mobile scaffolding
- imitation marble/wood graining – softeners, floggers, over-grainers, mottlers, fitches, brush-grainer, cutters, rubber combs, heart grain simulator, check roller, steel combs, veining horn, chamois, stippling brushes, pencils, crayons, feathers

Quality Assurance requirements may include:

- quality of material
- preparation of surfaces
- application techniques
- cleanliness of application areas
- handling techniques

Personal protective equipment may include:

- safety goggles/glasses
- gloves
- boots
- respirators/masks
- caps
- jacket

- broken colour effects – rags, chamois, hessian, paper, special rollers, sponges
- stencilling – drawing/tracing materials, cutting knives/scalpels, cutting board, stencil material, stencil brushes and rollers
- gilding – Gilders cushion, mop, knife, tip, cotton wool

All work must be carried out in accordance with OH&S regulations.

Reporting of faults to be in accordance with organisation's worksite procedures and may be verbal or written

## EVIDENCE GUIDE

Competency is to be demonstrated by the safe and effective application of the appropriate processes to produce mirror paint finishes plus any three of the other decorative finishes listed within the "elements".

Painted finishes are to be free of defects and comply with manufacturer's and job/architect specifications.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- select and use appropriate processes, tools and equipment
- apply organisational quality procedures and process within context of applying paint finishes
- prepare surfaces in accordance with substrate requirements, job/architect's and manufacturer's specifications
- ensure adequate ventilation and lighting

### Critical Aspects of Evidence (Cont'd)

- protect adjoining surfaces by drop sheets, masking or removal of objects
- materials disposed of in accordance with manufacturer's recommendations
- identify typical faults and problems that occur and necessary action taken to rectify
- finish surfaces to specification
- interactively communicate, where applicable, to ensure safe and efficient work operations

### (2) Pre-requisite Relationship of Units

Pre-requisite for this unit are:

- BCGCOR0051A Use hand and power tools
- BCGCOR0212A Prepare surfaces
- BCGPAD1282A Apply paint by brush/roller
- BCGPAD1293A Match specified paint colour
- BCGPAD1303A Apply clear timber finish
- BCGPAD0772A Apply paint by spray
- BCGPAD1322A Prepare surfaces for painting and decorating

### (3) Underpinning Knowledge and Skills

#### Knowledge

Knowledge of:

- workplace and equipment safety requirements
- specifications
- decorative painted finishes technology
- applying paint with brushes and rollers
- applying paint by spray
- compatibility of surface coatings to substrates
- preparation of surfaces for the application of mirror finish, broken colour effects, imitation marbling, imitation wood graining, gilding, colour fleck and stencilling
- mirror finish materials and application methods – spray, brush, brush/roller, flood coating
- broken colour effect materials and application techniques – rag rolling, bagging, flouncing, sponging, dragging, stippling, blending and highlighting
- colour fleck materials and application techniques
- imitation marble materials and application techniques
- imitation wood grain materials and application techniques
- gilding materials and application techniques
- stencilling materials and application techniques
- hazardous materials
- plant, tools and equipment
- stone effect

#### Skills

The ability to:

- work safely effectively and efficiently
- organise and plan work
- interpret specifications
- identify and select materials appropriate to the job
- use tools equipment and materials
- prepare materials
- check finished work
- communicate effectively
- clean an area and dispose of waste safely
- store materials/components
- respond to emergency situations
- calculate material quantities
- apply mirror finish paint work
- produce a variety of broken colour effects
- produce a variety of imitation marble effects
- produce a variety of imitation wood grain effects
- produce a gilded finish to a variety of architectural features
- apply a multicoloured stencil
- produce a colour fleck finish
- protect surrounding

**(4) Resource Implications**

The following resources should be provided:

- workplace location
- tools and equipment
- appropriate materials applicable to activities

**(5) Method of Assessment**

Competency should be assessed through direct observation and questions related to underpinning knowledge

Competency should be assessed under general guidance checking at various stages of the process and at the completion of each activity against performance criteria and specifications

**(6) Context of Assessment**

Competency may be assessed in the workplace or simulated workplace setting

Assessment should be while tasks are undertaken either individually or as part of a team under limited supervision.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>• Carries out established processes</li> <li>• Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Manages processes</li> <li>• Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes principles and procedures</li> <li>• Evaluates and reshapes process</li> <li>• Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 3	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGPAD0783A: Apply texture coatings**

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and apply textured coatings to surface areas, and applies to individuals working in the painting decoration trades in the construction industry.

Competency Field:

General Construction

<b>ELEMENT OF COMPETENCY</b>		<b>PERFORMANCE CRITERIA</b>	
1.	Plan and prepare work	1.1	Quality Assurance requirements for company's painting and decorating operations recognised and adhered to.
		1.2	Occupational Health & Safety (OH&S) requirements for workplace environment and painting processes and application of textured finishes recognised and adhered to.
		1.3	Materials selected and checked against specifications of finishes schedule.
		1.4	Appropriate personal protective equipment selected, correctly fitted and used.
		1.5	Tools and equipment selected consistent with job requirements, checked for serviceability and any faults reported to supervisor.
		1.6	Safety hazards identified and correct procedures used to reduce risk to self and others.
2.	Set up scaffolding if required	2.1	Scaffolding erected where required to appropriate working height to OH&S requirements.
3.	Prepare surfaces for finishing	3.1	Surface prepared as per manufacturer's specification in compliance with substrate requirements.
		3.2	Filler and primer/sealer applied as per manufacturer's specification.
4.	Apply texture material by trowel or roller	4.1	Material mixed to manufacturer's specifications.
		4.2	Coatings applied by trowel or roller to manufacturer's specifications and texture profile to sample.

- |    |                                   |     |   |
|----|-----------------------------------|-----|---|
| 5. | Apply finishing material by spray | 5.1 | Material mixed to manufacturer's specifications.  |
|    |                                   | 5.2 | Coating applied by spray to manufacturer's specifications and texture profile to sample.    |
| 6. | Clean -up                         | 6.1 | Equipment dismantled, cleaned and maintained.   |
|    |                                   | 6.2 | Area cleaned and waste disposed of safely.  |
|    |                                   | 6.3 | Unused materials sealed and stored.   |
|    |                                   | 6.4 | Tools and equipment cleaned with correct solvent and stored to manufacturer's instructions. |

## RANGE STATEMENT

This unit applies to textured finishes created by the use of trowel, roller or spray equipment. These are high-build (acrylic or styrene/acrylate) coatings formulated specifically for application over off-form concrete, fibrous cement sheeting, tilt-up concrete slabs and other brick and masonry surfaces. They may also be applied over paper-faced plasterboard.

Quality Assurance requirements are as per specifications and may include:

- quality of materials
- preparation of surfaces
- application techniques
- attention to colour and profile of texture
- cleanliness of application areas
- handling techniques
- maintenance of equipment

Tools and equipment may include:

- trowels
- roller equipment
- brushes
- spray equipment
- mixers
- compressor
- hoses and fittings
- vacuum cleaner
- brooms
- trestles and planks, step ladders or mobile scaffolding

Occupational Health & Safety (OH&S) requirements may include:

- protective clothing
- protective equipment
- hazardous materials
- workplace conditions and isolating areas
- use of plant, equipment and tools
- use of working platforms/scaffolding

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators/masks
- ear muffs/plugs
- cap or balaclava
- jacket
- hard hat

Reporting of faults may be verbal or written.

## EVIDENCE GUIDE

Competency is to be demonstrated by carrying out each of the textured processes to finish a surface according to specification

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational quality procedures and processes within the context of applying textured finishes to surfaces
- consider as part of job planning weather, continuous area of surface to be textured, material and labour requirements
- select and use appropriate processes, tools and equipment
- apply texture material with strict adherence to manufacturer's coverage rate specification, that is, litres per m<sup>2</sup>
- treat bond breaker according to specification when applying texture coatings to off-form concrete and tilt-up concrete surfaces
- prepare material to specifications
- protect adjoining surfaces protected by drop-sheets or masking
- inspect fittings and hoses for serviceability prior to connection to pressure lines for spray equipment
- clean gun and fittings after task completed
- identify typical faults and problems that occur and necessary action taken to rectify
- interactively communicate with others to ensure safe and efficient work operations
- calculate quantities

### (2) Pre-requisite Relationship of Units

Pre-requisites to this unit are:

- BCGCOR0051A Use hand and power tools
- BCGCOR0212A Prepare surfaces
- BCGPAD1322A Prepare surfaces for painting and decorating

This unit may be assessed concurrently with:

- BCGPAD1282A Apply paint by brush/roller
- BCGPAD1293A Match specified paint colour
- BCGPAD0772A Apply paint by spray
- BCGMAS1242A Apply solid render
- BCGPAD0191A Prepare for painting and decorating

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- specifications
- surface preparation specific to texture coatings
- texture coatings and their properties, uses and limitations
- preparatory materials
- spray equipment
- roller equipment
- tools and equipment
- spray application
- hazardous materials
- maintenance of equipment

Skills

The ability to:

- work safely
- interpret specifications
- organise work
- set out work
- use spray equipment
- use tools and equipment including roller and trowel and associated accessories
- clean equipment
- communicate effectively

**(4) Resource Implications**

The following resources should be provided:

- workplace location
- tools, plant and equipment appropriate to application tasks
- appropriate materials to carry out activities
- specifications relevant to activity

**(5) Method of Assessment**

Competency should be assessed while tasks are undertaken.

Assessment may involve:

- observation of application process
- questioning related to underpinning knowledge

Assessment may be by intermittent checking at various stages of each task application or at the completion of each task in accordance with the performance criteria.

**(6) Context of Assessment**

Competency should be assessed in the normal or simulated workplace environment.

Assessment should be while tasks are undertaken either individually or as part of a team operation under limited supervision.



## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 3	
Work with others and in team	Level 2	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 3	
Use technology	Level 3	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGPAD1133A: Apply/install waterproofing and damp-proofing**

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and apply waterproofing and damp-proofing materials to structural surfaces, and applies to individuals, working in masonry/carpentry/painting trades and bituminous workers in the construction industry.

Competency Field:

General Construction

ELEMENT OF COMPETENCY	PERFORMANCE CRITERIA
1. Plan and prepare work	<p>1.1 Quality Assurance requirements of company's construction operations recognised and adhered to.</p> <p>1.2 Occupational Health and Safety (OH&amp;S) requirements for workplace environment and the preparation and application of waterproofing processes identified and adhered to.</p> <p>1.3 Type of waterproofing material identified in accordance with job specification, state of structure and job safety requirements.</p> <p>1.4 Area of structure to be water proofed identified from job drawings and specifications or diagnosed damp fault area.</p> <p>1.5 Area of structure to be water proofed inspected for defects and soundness in accordance with job and manufacturer's specifications.</p> <p>1.6 Appropriate personal protective equipment selected, correctly fitted and used.</p> <p>1.7 Tools and equipment selected to carry out processes consistent with job requirements and checked for serviceability.</p> <p>1.8 Hazardous materials stored in accordance with OH&amp;S legislation.</p>
2. Maintain safe working area	<p>2.1 Safe working area maintained in accordance with OH&amp;S regulations.</p> <p>2.2 Safety hazards identified and correct procedures used to minimise risk to self and others.</p>

- 3. Prepare surface
  - 3.1 Defects including caulking corrected and made good to the requirements of manufacturer's specifications.
  - 3.2 Surface of structure to be water proofed, prepared to manufacturer's specification.
  - 3.3 Prepared surface of structure, prime coated to manufacturer's specification, where applicable.
- 4. Apply waterproofing membrane
  - 4.1 Waterproofing membrane applied to primed surface of structure to correct thickness in accordance with manufacturer's job specification.
  - 4.2 Sheeting membrane laid and lapped to location with joints taped or welded to job and manufacturer's specifications.
  - 4.3 Sprayed material applied to location to a consistent thickness cover to job specifications.
  - 4.4 Membrane applications turned up or over, wherever applicable, in accordance with job specifications.
  - 4.5 Waterproofing membrane cured to structure in accordance with manufacturer's specification.
  - 4.6 Waterproofing membrane protected using methods and materials consistent with manufacturer's specification.
- 5. Apply waterproofing to walls/floor/roof
  - 5.1 Materials prepared for application to manufacturer's recommendations.
  - 5.2 Waterproofing material applied to surface in accordance with manufacturer's recommendations.
  - 5.3 Sheeted materials laid, lapped and welded or joined according to manufacturer's specifications.
  - 5.4 Sprayed material applied to face using appropriate equipment and producing a consistent thickness cover to manufacturer's and job specifications.
  - 5.5 Spread and applied compounds screeded and floated or rolled to manufacturer's and job specifications.
  - 5.6 Moisture barrier material turned up or down as applicable to job specifications.
  - 5.7 Moisture barrier installed to internal or external surface to manufacturer's specifications.

- |    |   |     |   |
|----|---|-----|---|
| 6. | Apply waterproofing through injection method to damp proof course | 6.1 | Materials prepared for application to manufacturer's recommendations.   |
|    |   | 6.2 | Equipment prepared and set up for injection process to manufacturer's recommendations.                                    |
|    |   | 6.3 | Damp-proof course made water resistant using injection method to specifications.  |
| 7. | Clean-up  | 7.1 | Surface cleaned and area cleared to specification.  |
|    |   | 7.2 | Waste materials removed and placed into job waste bins or to requirements of Environmental Protection Authorities (NEPA). |
|    |   | 7.3 | Unused materials stored/stacked.  |
|    |   | 7.4 | Tools and equipment cleaned, maintained and stored.   |

## RANGE STATEMENT

This unit applies to waterproofing materials applied on site to concrete and masonry structures, which may be existing or new and under construction.

Types of construction include:

- Brick-work
- block-work
- stonework
- reinforced in situ concrete
- pre-cast concrete

Waterproofing applications include:

- concrete roofs
- wall surfaces
- floor surfaces
- basements (tanking)
- damp proof through walls

Waterproofing materials include but are not limited to:

- polyethylene sheeting
- bituminous sheeting
- bitumen
- plastic strip
- aluminium strip
- liquid sealants
- mastic sealants
- mortar additives

Surface preparation may include but are not limited to:

- filling holes or depressions
- washing down
- chipping or scraping of protrusions
- cleaning free of dust
- priming or sealing of surface
- removing sharp edges

Tools and equipment may include but are not limited to:

- air compressors and spray equipment
- trowels
- rollers
- brushes
- angle grinders
- electric drills
- shovels
- concrete mixer
- wheelbarrows
- knives or cutting blades
- hammers
- brooms
- vacuum cleaner

Quality Assurance requirements may include:

- work procedures
- safety requirements
- control of handling
- condition of material
- application procedures
- specification finish

Liquid waterproofing material applications include:

- spraying
- brushing
- rolling
- pressure injection
- floated or screeded

OH&S requirements to be in accordance with Statutory requirement Regulations and may include:

- protective clothing
- protective equipment
- working platforms
- working from scaffolding
- safety hazards
- use of plant and equipment
- hazardous materials

Material preparation may include:

- mixing
- stirring
- batching and mixing
- cutting sheet material to length
- heating material

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- masks
- respirators

## EVIDENCE GUIDE

Competence is to be demonstrated by applying waterproofing to both horizontal and vertical surfaces using a membrane in one situation and a separate material application for the other, and the applying of waterproofing to a mortar joint.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects.

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- apply organisational quality procedures and process within context of installing or repairing waterproofing to a building

**Critical Aspects of Evidence (Cont'd)**

- identify location and details of waterproofing materials and application
- select and use appropriate processes, tools and equipment to carry out tasks
- use safe and effective procedures to handle materials
- use safe and effective procedures to prepare surfaces for application
- seal or weld joints between materials in accordance with manufacturer's specifications
- identify typical faults and problems that occur and necessary action taken to rectify
- interactively communicate with others to ensure safe and effective operations
- complete waterproofing application to job specifications

**(2) Pre-requisites Relationship of Units**

- Nil

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements including relevant statutory regulations, codes and standards
- drawings and specifications
- construction of buildings
- requirements in waterproofing of buildings
- waterproofing methods
- materials and characteristics
- tools and equipment
- plant and equipment
- standards for waterproofing and damp-proofing applications

Skills

The ability to:

- work safely
- organise work
- prepare surfaces
- set out work
- use tools and equipment
- use plant
- communicate effectively

**(4) Resource Implications**

The following resources should be provided:

- workplace location
- tools, plant and equipment appropriate to application processes
- materials relevant to the proposed activity
- appropriate documentation relevant to work activity

**(5) Method of Assessment**

Competency should be assessed while tasks are undertaken.

Assessment may involve:

- observation of application process
- inspection of completed work
- questioning related to underpinning knowledge

Assessment may be by intermittent checking at various stages of each task application or at the completion of each task in accordance with the performance criteria.

**(6) Context of Assessment**

Competency may be assessed in the normal or simulated workplace environment.

Assessment should be while tasks are undertaken either individually or as part of a team under limited supervision.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>• Carries out established processes</li> <li>• Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Manages process</li> <li>• Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes principles and procedures</li> <li>• Evaluates and reshapes process</li> <li>• Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 3	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 3	
Work with others and in team	Level 2	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGPAD1293A: Match specified paint colour**

Competency Descriptor:

This unit deal with the skills and knowledge required to mix and match paint colour, and applies to individuals engage in the preparation/application of surface coating materials.

Competency Field:

General Construction and Building Restoration

ELEMENT OF COMPETENCY	PERFORMANCE CRITERIA
1. Prepare materials and equipment	1.1 Quality Assurance requirements of company's painting and decorating operations recognised and adhered to. 1.2 OH&S requirements for workplace environment and handling and mixing of paint recognised and adhered to. 1.3 Materials checked for conformity against specifications. 1.4 Appropriate personal protective equipment selected, correctly fitted and used in accordance with safe working practices. 1.5 Tools and equipment selected to carry out processes consistent with job requirements and checked for serviceability. 1.6 Safety hazards identified and correct procedures used to reduce risk to self and others.
2. Match paint colour to specified sample	2.1 Base colour identified from analysis of sample. 2.2 Paint type, tint base and sheen level of sample established. 2.3 Colorants suitable for colour match selected. 2.4 Colour mixed and matched against sample and allowed to dry to establish accuracy of colour match. 2.5 Full quantity of paint mixed and colour match tested again before applying.
3. Clean-up	3.1 Area cleaned. 3.2 Waste and unwanted material disposed of safely. 3.3 Unused materials sealed and stored. 3.4 Tools and equipment cleaned, maintained and stored.



## RANGE STATEMENT

This unit applies to the mixing and matching of colour to sample in the area of commercial painting and decorating.

Mixing colour in surface coatings includes:

- solvent-borne (alkyd, urethane, urethane/alkyd, urethane oil or modified alkyd resins)
- latex (PVA, PVA/acrylic, acrylic and styrene acrylic)
- roofing paints (latex and solvent-borne)
- some timber stains
- decorative "single-pack" materials

The term sample refers to:

- in-situ previously painted unit or area
- paint manufacturer's colour card
- fan deck

OH&S requirements may include:

- protective clothing and equipment
- handling of hazardous materials
- working environment
- emergency procedures
- operating equipment

Personal protective equipment may include:

- safety goggles/glasses
- respirators
- gloves
- overalls
- boots

Tools and equipment may include:

- stirring implements
- colorant dispenser
- mechanical paint mixer (shaker)

## EVIDENCE GUIDE

Competence is to be demonstrated by the successful eye matching of a colour to a given sample using single-pack proprietary surface coatings and universal colorants.

### (1) Critical Aspects of Evidence

It is essential that competence be demonstrated in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures
- select and use appropriate processes, tools and equipment
- apply to organisational quality procedures and process within context of matching specified paint colour
- identify base colour by analysis of sample
- mix paint thoroughly after colorant is added
- add tints gradually to achieve colour match to ensure minimal waste

**Critical Aspects of Evidence (Cont'd)**

- record formula for future reference (if applicable)
- check properties of the paint to ensure that they are not affected by addition of colorant (especially during the drying process)
- observe required standards related to colour where applicable

**(2) Pre-requisite Relationship of Units**

Pre-requisite for this unit is:

- BCGCOR0051A Use hand and power tools

This competency may be assessed concurrently with:

- BCGPAD0773A Apply paint by spray
- BCGPAD0763A Apply decorative finishes
- BCGPAD1283A Apply paint by brush/roller

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- workplace and equipment safety requirements
- specifications
- paint types and uses
- hazards associated with surface coatings
- tools and equipment related to mixing paint
- basic colour theory
- colour harmony and colour schemes
- colour measurement systems
- National Standards applicable to the use of colour in painting and decorating
- colour standards for general purposes
- the use of colour for marking physical hazards and the identification of certain equipment in the industry
- identification of the contents of piping, conduits and ducts
- guide to the specification of colours

Skills

The ability to:

- work safely
- organise work
- interpret specifications
- use tools and equipment
- identify the base paint and colorants required to match a colour
- mix and match by "eye" a range of colours in a range of surface coatings and sheen levels to specification
- estimate quantities of material
- use a colorant dispenser

**Underpinning Knowledge and Skills (Cont'd.)****Knowledge**

Knowledge of:

- factors that effect the apparent colour of paint including:
  - the gloss level and paint type
  - colour and opacity of the paint
  - age and deterioration of painted sample if in-situ
  - lighting conditions
  - colour of surface covered by paint
  - colour of drapes and other furnishings
- colour considerations regarding durability of colours in exterior locations
- colours used in heritage painting or restoration

**(4) Resource Implications**

The following resources should be provided:

- workplace location or simulated workplace location
- tools and equipment appropriate to application tasks
- materials appropriate to tasks
- specifications and samples

**(5) Method of Assessment**

Competency should be assessed through direct observation and questions related to underpinning knowledge.

Competency should be assessed under general guidance checking at various stages of the process and at completion of the activity against performance criteria and specifications.

**(6) Context of Assessment**

Competency may be assessed in the workplace or simulated workplace setting.

Assessment should be while tasks are being done under limited supervision.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 3	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 3	
Work with others and in team	Level -	
Use mathematical ideas and techniques	Level 3	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGPAD1353A: Apply industrial protective coatings**

## Competency Descriptor

This unit deals with the skills and knowledge required to prepare and apply industrial protective coatings to structural and other surface fabrics, and applies to individuals working with painting in the construction industry.

Competency Field: General and Civil Construction

ELEMENT OF COMPETENCY	PERFORMANCE CRITERIA
1. Select and prepare materials and equipment	1.1 Quality Assurance requirements of company's construction operations recognised and adhered to. 1.2 Occupational Health & Safety (OH&S) requirements for workplace environment and preparation of surfaces and application and storage of protective industrial coatings recognised and adhered to. 1.3 Materials selected and checked for conformity against job specifications. 1.4 Appropriate personal protective equipment selected, correctly fitted and used. 1.5 Tools and equipment selected to carry out processes consistent with job requirements checked for serviceability and any faults reported and/or rectified. 1.6 Safety hazards identified through colour coding and correct procedures used to minimise risk to self and others. 1.7 Working knowledge of correct procedures used in industrial colour coding for safety occupation and health standards.
2. Erect work platform	2.1 Work platform erected to appropriate working height and within the Occupational Health & Safety (OH&S) requirements.
3. Prepare iron and steel, concrete surfaces for the application of protective coating systems	3.1 Specific substrate properties identified and correct method of surface preparation selected as per job requirement. 3.2 Personal protective equipment selected, correctly fitted and used in accordance with preparatory work application and in compliance with relevant Safety Standards.

- 3.3 Surface prepared as per job and manufacturer's specification in compliance with substrate and coatings requirements and hazardous materials warnings as per National Environmental Protection Authority's (NEPA) requirements.
- 4. Apply protective coating system
  - 4.1 Job location checked to ensure provision of adequate ventilation and precautions taken to prevent fire and/or explosion.
  - 4.2 Most appropriate method of application selected, based on the job location, type of paint, type and condition of surface and climatic conditions.
  - 4.3 Personal protective equipment selected, correctly fitted and used in accordance with material and method of application and in compliance with the relevant Safety Standards.
  - 4.4 Coating/paint system applied as per job/manufacturer's specification to meet wet and dry thickness of coatings specification.
- 5 Clean-up
  - 5.1 Area cleaned.
  - 5.2 Waste and unwanted material disposed of safely as per National Environmental Protection Authority's (NEPA) Code of Practice.
  - 5.3 Unused materials sealed and stored as per requirement for: The Storage and Handling of Flammable and Combustible Liquids.
  - 5.4 Equipment and machinery/tools maintained and stored correctly.

## RANGE STATEMENT

This unit applies to the surface preparation of iron and steel surfaces and subsequent application of “wet” industrial protective coating systems (paint) as a protective measure against atmospheric corrosion. Surface Preparation Treatments must be compliant with conditions detailed in Engineering Specifications and may include:

- Hydra – wet blast cleaning
- abrasive blast cleaning
- degreasing
- cleaning and preparation using acid solutions
- pickling (chemical de-scaling)
- phosphate conversion coatings
- flame cleaning
- power tool cleaning
- hand tool cleaning

Tools and equipment may include but are not limited to:

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• scrapers</li> <li>• hand sanders</li> <li>• mechanical sanders</li> <li>• mechanical grinders</li> <li>• abrasive blasting equipment</li> <li>• needle gun</li> <li>• de-scaling chisels</li> <li>• paint stirrers</li> <li>• drop sheets</li> <li>• flame cleaning equipment</li> <li>• hand and mechanical wire brushes</li> <li>• hand blast cleaning equipment</li> <li>• trowel – (steel, plaster or wood)</li> </ul> | <ul style="list-style-type: none"> <li>• chipping hammer</li> <li>• paint pans/buckets</li> <li>• brush-ware and brush-ware accessories</li> <li>• roller frames</li> <li>• covers</li> <li>• buckets and roller accessories</li> <li>• high pressure water blaster</li> <li>• conventional air spray equipment</li> <li>• airless spray equipment</li> <li>• rags</li> <li>• duster brushes</li> <li>• HVLP spray equipment</li> </ul> |
|---|---|

Work platforms may include but are not limited to:

- ladders
- step ladders
- trestles
- planks
- hop-ups
- aluminium mobile scaffolding
- scissor-lift
- cherry picker

In-situ scaffolding erected by qualified personnel.

Personal protective equipment may include but are not limited to:

- safety goggles/glasses
- safety boots
- gloves and mittens
- respiratory protection devices including dust masks
- cartridge and supplied air-mask
- ear muffs/plugs
- caps
- jacket
- overalls
- abrasive blasting apparel
- industrial safety helmets
- industrial safety belts and harnesses

Occupational Health & Safety (OH&S) requirements may include those associated with exposure to hazardous materials during the preparation of surfaces and subsequent application of coatings.

Hazards include:

- inhalation of solvent vapour
- chemicals fumes
- gases
- harmful dusts
- metal chips
- abrasive grit
- asbestos fibres
- exposure to lead products
- waste containing lead
- skin contact with harmful chemicals and paint products
- ingestion of harmful chemicals and paint/coating products
- eye damage due to solvents and dusts
- high noise levels
- confined spaces
- manual handling
- falling objects
- electrical
- fire
- equipment and machinery faults
- faults associated with work access platforms
- faults related to poor “house-keeping”

Emergency procedures related to the above.

Due to the potentially hazardous environment of the industrial protective coatings industry, regulatory authorities require enterprises meet stringent OH&S regulations that relate to the health and welfare of the operative, the health and welfare of the general public and the welfare of the environment.

Surfaces to be prepared and coated may include iron and steel structures – new and previously coated.

Methods of application as outlined in Specification and may include:

- brush
- roller
- brush/roller combination
- woollen glove
- conventional air-spray or airless spray
- steel trowel



**Paint coatings are outlined in Specification and may include:**

- inorganic zinc silicate paint
- organic zinc primer
- polyurethane primer (two-pack)
- high-build alkyd primer
- alkyd primer
- epoxy primer (two -pack)
- vinyl primer
- chlorinated rubber primer
- zinc dust – zinc oxide primer
- etch primer (two-pack)
- acrylic latex primer
- coal tar primer (two -pack)
- high-build epoxy
- high-build chlorinated rubber
- high-build polyurethane (two-pack)
- high build vinyl
- alkyd micaceous iron oxide
- alkyd undercoat
- aluminium paint
- gloss alkyd paint
- acrylic latex paint
- bitumen and coal tar paint
- vinyl gloss
- catalysed epoxy gloss (two -pack)
- chlorinated rubber gloss
- polyurethane gloss (two-pack)
- silicone acrylic paint alkyd zinc primer
- zinc dust graphite paint
- silicone aluminium

National Environmental Protection Authority (NEPA) Standards documents referenced within this Unit.

Industry Specifications relevant to the Preparation and Pre-treatment of Metal Surfaces Prior to applying Protective Coating are:

- method selection guide for preparation and pre-treatment of metal surfaces prior to protective coating
- degreasing of metal surfaces using solvent or alkali solution
- power tool cleaning of steel surfaces
- flame cleaning steel surfaces
- abrasive blast cleaning of steel surfaces
- pickling steel surfaces
- phosphate treatment of iron and steel surfaces
- hand cleaning of steel surfaces
- wash primer pre-treatment of metal surfaces
- pictorial surface preparation for painting steel surfaces
- cleaning and preparation for metal surfaces using acid solutions
- cleaning and preparation of concrete surfaces using acids solution (blast cleaning methods)
- power water pressure cleaning – blast cleaning

Safety requirements relate to this unit:

- selection, use and maintenance of respiratory protective devices
- the selection, care and use of industrial safety helmets
- Industrial Safety Belts and Harnesses
- the storage and handling of flammable and combustible liquids
- industrial safety gloves and mittens
- safety footwear
- guide to the protection of iron and steel against exterior atmospheric corrosion
- safe working in confined spaces
- clothing for protection against hazardous chemicals
- guide to the protection of concrete surface in an industrial marine environment against atmosphere and chemical deterioration

## EVIDENCE GUIDE

Competence is to be demonstrated by the application of the most appropriate surface preparation and coating system to a given new or previously metal or surface, in compliance with all relevant OH&S and environmental regulations and considerations.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations in compliance with the relevant authorities
- indicate compliance with organisational policies and procedures
- select and use appropriate processes, tools and equipment to carry out tasks
- apply organisational quality procedures and processes within context of application of industrial protective coatings
- identify most suitable surface preparation treatment for specific examples
- carry out surface preparation in accordance with OH&S, environmental, finish and substrate requirements
- prepare surfaces by SSPC/NACE abrasive blast cleaning as required by job specification
- select most appropriate coating system for specific examples
- apply appropriate coating system for a specific job using most appropriate method of application and in accordance with OH&S, environmental, finish and substrate requirements
- interactively communicate with others to ensure safe and effective workplace and coating operations
- complete of application process and finished surface to specifications
- can identify surface preparation standards, common faults in coating failure, rectify problems to meet job specification

### (2) Pre-requisite Relationship of Units

Pre-requisites for this unit are:

- BCGCOR0061A Use plant and equipment
- BCGCOR0212A Prepare surfaces
- BCGPAD1282A Apply paint by brush/roller
- BCGPAD0772A Apply paint by spray
- BCGCEO1322A Prepare surface for painting and decorating

**(3) Underpinning Knowledge and Skills**Knowledge

Knowledge of:

- Workplace and equipment OH&S Standards and requirements, Work Safety regulations and Codes of Practice
- safe work practices
- job planning
- specifications interpretation
- planning and design for corrosion protection
- atmospheric environments
- hazards associated with solvent vapour, chemicals fumes, gases, harmful dusts, metal chips, abrasive grit, asbestos fibres;
  - exposure to lead products and waste containing lead
  - skin contact with harmful chemicals and paint products
  - ingestion of harmful chemicals and paint products
  - eye damage due to solvents and dusts
  - high noise levels
  - confined spaces
  - manual handling
  - falling objects
  - electrical
  - fire
  - equipment and machinery faults
  - faults associated with work access platforms
- variances in work carried out within industrial protective coatings industry
- surface preparation treatments and associated equipment including:
  - abrasive blast cleaning
  - degreasing
  - cleaning and preparation using acid solutions
  - pickling (chemical de-scaling)
  - phosphate conversion coatings
  - flame cleaning
  - power tool cleaning
  - hand tool cleaning
- corrosion process and protection of metals
- protective surface coatings technology for corrosion protection
- capability and maintenance of hand and power tools
- inspection and testing procedures for protective coatings for metal e.g. using the wet and dry film thickness gauges
- maintenance of protective coating systems
- common faults associated with industrial painting and methods to correct them

**Skills**

The ability to:

- plan work
- work safely, efficiently and effectively
- interpret specifications, drawings and Safety Standards relevant to industrial protective coatings and associated OH&S procedures
- take off dimensions, quantities, types of materials and application requirements for a wide range of iron and steel surfaces and profiles
- identify and select processes and materials for surface preparation/treatment in compliance with relevant OH&S and NEPA Standards
- use tools and equipment safely, efficiently and effectively
- prepare materials with strict adherence to OH&S & NEPA Standards
- apply appropriate coating system for specific job using most appropriate method of application in accordance with OH&S, environmental, finish and substrate requirements
- clean area and dispose of waste with strict adherence to OH&S and NEPA Standards
- store materials/components with strict adherence to OH&S and NEPA Standards
- respond to emergency situations

**(4) Resource Implications**

The following resources should be provided:

- workplace or simulated workplace location
- tools and equipment appropriate to application processes
- materials relevant to application tasks
- drawings and specifications relevant to proposed tasks

**(5) Method of Assessment**

Competency will be assessed through direct observation of application to tasks and questions related to underpinning knowledge.

Competency will be assessed under general guidance, checking at various stages of the process and at completion of the activity against performance criteria and specifications.

**(6) Context of Assessment**

Competency will be assessed in the normal or simulated workplace environment

Assessment should be while tasks are undertaken either individually or while working with a partner or as part of a team.

## CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1	Level 2	Level 3
<ul style="list-style-type: none"> <li>Carries out established processes</li> <li>Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>Manages process</li> <li>Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>Establishes principles and procedures</li> <li>Evaluates and reshapes process</li> <li>Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 2
Communicate ideas and information	Level 1
Plan and organise activities	Level 2
Work with others and in team	Level 1
Use mathematical ideas and techniques	Level 2
Solve problems	Level 1
Use technology	Level 2

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

**BCGPAD1533A: Apply waterproofing for wall and floor tiling**

## Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and apply waterproof materials to waterproof and seal wall and floor tiles surfaces, and applies to individuals working in painting and surface finishing trades

Competency Field: General Construction

ELEMENT OF COMPETENCY	PERFORMANCE CRITERIA
1 Plan and prepare work	<p>1.1 Quality Assurance requirements of company's wall and floor tiling operations recognised and adhered to.</p> <p>1.2 OH&amp;S requirements for workplace environment and waterproofing processes identified and adhered to.</p> <p>1.3 All work to be carried out in accordance with Building Standards for Waterproofing of Wet Areas Within Residential Buildings.</p> <p>1.4 Type of waterproofing material identified in accordance with job specification, type of construction surface and job safety requirements.</p> <p>1.5 Surface area/s to be waterproofed identified from job drawings, specifications and job location.</p> <p>1.6 Area to be waterproofed inspected for defects and surface irregularities in accordance with job and manufacturer's specifications.</p> <p>1.7 Appropriate personal protective equipment selected, correctly fitted and used.</p> <p>1.8 Tools and equipment selected to carry out processes consistent with job requirements and checked for serviceability.</p> <p>1.9 Hazardous material stored in accordance with OH&amp;S legislation.</p>

- 
- |    |  |     |   |
|----|--|-----|---|
| 2. | Prepare for work application               | 2.1 | Waterproofing material checked for conformity to specification and compatibility with surface material and proposed tile adhesive.    |
|    |  | 2.2 | Safety hazards identified and correct procedures used to minimise risk to self and others.  |
|    |  | 2.3 | Safe working area established and maintained in accordance with MSDS, directions where applicable, and OH&S regulations.              |
| 3  | Prepare surface                            | 3.1 | Defects including caulking made good to requirements of waterproofing material manufacturer's specifications.                         |
|    |  | 3.2 | Surface/surfaces to be waterproofed prepared to manufacturer's specification.   |
|    |  | 3.3 | Prepared surface/s prime coated to waterproofing material manufacturer's specification, where applicable.                             |
|    |  | 3.4 | Perimeter and corner flashings, where applicable, prepared to job requirements and placed and fixed to job specifications.            |
| 4  | Apply material to form waterproof membrane | 4.1 | Material mixed or prepared in accordance with manufacturer's specifications.  |
|    |  | 4.2 | Matt material reinforcing set out and cut to requirements of area waterproofing junctions and surface requirements, where applicable. |
|    |  | 4.3 | Waterproofing material applied to surface in accordance with manufacturer's specifications and job requirements.                      |
|    |  | 4.4 | Reinforcement material worked into locations in accordance with manufacturer's specifications.  |
|    |  | 4.5 | Waterproof membrane installed in accordance with material manufacturer's recommendations and specified thickness and finish.          |
|    |  | 4.6 | Bond-breaker used in installation to ensure no adhesion between floor and framed walls in accordance with Building Standards.         |
|    |  | 4.7 | Waterproof membrane cured to surface in accordance with manufacturer's specifications.  |
|    |  | 4.8 | Installed waterproofing protected using methods and materials consistent with manufacturer's specifications.                          |

5	Install tap and drainage seals	5.1	Recess for tap seals formed and tap seal/flange fitted and installed to manufacturer's and job specifications, sealing surrounds of tap.
		5.2	Recess for leak control flange in floor waste formed and flange fitted and sealed to job specifications flush with surface of waterproof membrane.
		5.3	Correct sealant/adhesive used for flange fitting in accordance with compatibility of membrane and flange materials.
6	Clean Up	6.1	Surface cleaned and area cleared to specification.
		6.2	Waste materials removed and placed into job bins or to requirements of MSDS.
		6.3	Unused materials stored/stacked.
		6.4	Tools and equipment cleaned, maintained and stored.

## RANGE STATEMENT

This unit applies to waterproofing materials applied to surfaces to provide a waterproof seal for wall and floor tiling.

All waterproofing construction is to be in accordance with:

- Building Standards for Waterproofing of Wet Areas Within Residential Buildings
- Building Code of Australia
- 'membrane materials must be compatible with tile adhesives'

Waterproofing applications include:

- shower areas
- bathroom areas
- laundry areas
- floors, walls and hob walls

Types of construction surfaces include:

- render over brickwork
- block work
- fibre cement sheeting on wall/floor framing
- waterproof plywood/particleboard on floor framing
- concrete

Surface preparation may include but is not limited to:

- filling of holes or depressions
- washing down
- chipping or scraping of protrusions
- cleaning free of dust
- punching nails



Waterproofing materials include but are not limited to:

- fibreglass reinforced plastic
- epoxy resins
- acrylic emulsions
- sheet synthetic rubber
- sheet plastic

Reinforcing material may include:

- fibreglass mat
- polyester mat
- chop fibre mat

OH&S requirements to be in accordance with Statutory legislation and regulations and may include:

- protective clothing
- protective equipment
- safety hazards
- use of plant and equipment
- hazardous materials

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- masks
- respirators

Tools and equipment may include but are not limited to:

- rollers
- brushes
- pots
- cutting blades
- scissors
- straight edge
- measuring tape/rule
- spirit level
- chisels
- hammer
- cold chisel
- angle grinders
- electric drills
- buckets
- broom

Liquid waterproofing material applications include:

- brushing
- rolling

Quality Assurance requirements may include:

- work procedures
- safety requirements
- control of handling
- condition of material
- application procedures
- specification finish

Material preparation may include:

- mixing
- stirring
- batching and mixing
- cutting sheet material to length

## EVIDENCE GUIDE

Competency is to be demonstrated by applying waterproofing material to form an in-situ liquid membrane, and installing seals to tap locations and a leakage control waste to a nominated shower area.

### (1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- apply organisational quality procedures and processes within context of installing waterproofing to a wet area
- identify location and details of waterproofing materials and application
- select and use appropriate processes, tools and equipment
- use safe and effective procedures to handle materials
- use safe and effective procedures to prepare surfaces for application
- seal joints between sheet materials and floors and walls in accordance with manufacturer's specifications
- identify waterproofing material's compatibility with surface and proposed tile adhesive
- demonstrate correct techniques in preparing and applying waterproofing material to surfaces to manufacturer's specifications
- demonstrate compliance with material application for turn-ups, junctions with frame construction and junctions between walls and floors to the standards
- complete waterproofing material application to job specifications, thickness and the standards
- identify typical faults and problems that occur and the necessary action taken to rectify
- interactively communicate with others to ensure safe and effective operations
- demonstrate effective installation of tap seals and leakage control wastes to waterproof membrane

### (2) Pre-requisite Relationship of Units

Pre-requisites for this unit are:

- BCGCOR0051A Use hand and power tools
- BCGCOR0111A Handle construction materials and safe disposal of waste
- BCGCOR0012A Prepare surfaces

**(3) Underpinning Knowledge and Skills**Knowledge

A knowledge of:

- workplace and equipment safety requirements including regulations, codes and standards
- Building Standards for Waterproofing of Wet Areas Within Residential Buildings
- drawings and specifications
- waterproofing materials
- types of tiles and tile adhesives
- structure of adhesives and waterproofing materials
- methods of applying materials to surfaces
- tools and equipment
- waste and tap fittings

Skills

The ability to:

- work safely
- read and interpret drawings, specifications and documentation
- organise work
- use tools and equipment
- recognise and safely handle hazardous material
- communicate effectively

**(4) Resource Implications**

The following resources should be provided:

- workplace location
- tools and equipment relevant to application processes
- materials relevant to the proposed waterproofing activity
- drawings, specifications and documentation relevant to activity

**(5) Method of Assessment**

Competency should be assessed while tasks are undertaken.

Assessment may involve:

- observation of application process
- inspection of completed work
- questioning related to underpinning knowledge

Assessment may be by intermittent checking at various stages of each task application or at the completion of each task in accordance with the performance criteria.

**(6) Context of Assessment**

Competency should be assessed in the workplace or simulated workplace setting.

Assessment should be while tasks are undertaken either individually or as part of a team under indirect supervision.

**CRITICAL EMPLOYABILITY SKILLS**

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
<ul style="list-style-type: none"> <li>• Carries out established processes</li> <li>• Makes judgement of quality using given criteria</li> </ul>	<ul style="list-style-type: none"> <li>• Manages process</li> <li>• Selects the criteria for the evaluation process</li> </ul>	<ul style="list-style-type: none"> <li>• Establishes principles and procedures</li> <li>• Evaluates and reshapes process</li> <li>• Establishes criteria for evaluation</li> </ul>

Collect, analyse and organise information	Level 3	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.