

Competency Standards for Caribbean Vocational Qualifications (CVQ)

CCBCG20902 Level II in Wall and Floor Tiling

Unit Number	Unit Title	Mandatory /Elective	Hours
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
BCGTIL0121A	Prepare for wall and floor tiling	Mandatory	40
BCGCOR0212A	Prepare surfaces	Mandatory	40
BCGCOR0242A	Carry out levelling	Mandatory	20
BCGTIL1092A	Lay and repair wall and floor tiles	Mandatory	160
BCGTIL1103A	Tile corners	Mandatory	40
BCGTIL1113A	Tile curved surfaces	Mandatory	40
BCGMAS0091A	Carry out excavation and install support	Elective	20
BCGMAS0101A	Carry out concreting to simple forms	Elective	20
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
BCGCOR0171A	Prepare for demolition process	Elective	40
BCGPAD0191A	Prepare for painting and decorating	Elective	40
BCGCAR0202A	Assemble simple partition frames	Elective	30
BCGSTW0222A	Oxy-acetylene cutting	Elective	20
BCGCOR0232A	Carry out general demolition	Elective	30
BCGCAR0252A	Erect and strip formwork for concrete work	Elective	20
BCGSTW0262A	Carry out steel-fixing	Elective	40
BCGCAR0282A	Use explosive power tools (EPT)	Elective	10
BCGMAS0292A	Carry out concrete work	Elective	40
BCGCAR0312A	Use static machines	Elective	30
BCGCAR0322A	Make set-outs	Elective	20
BCGMAS1242A	Apply solid render	Elective	40
BCGMAS1462A	Construct straight masonry block-work	Elective	60

CCBCG20902 Level II in Wall and Floor Tiling (Cont'd)

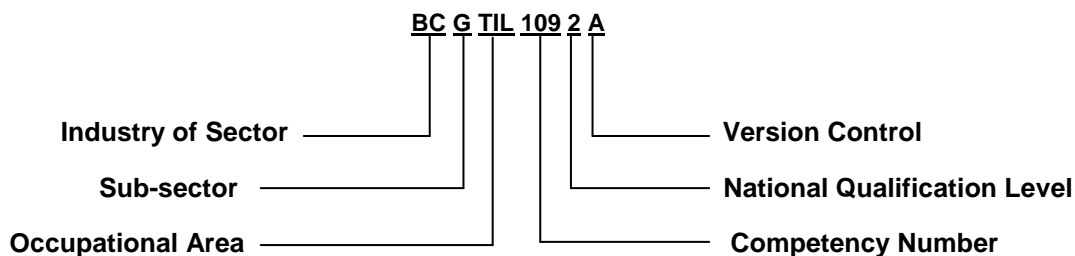
Unit Number	Unit Title	Mandatory /Elective	Hours
BCGMAS0803A	Install glass block work	Elective	20
BCGTIL0863A	Lay terrazzo	Elective	100
BCGMAS0943A	Carry out special finishes to concrete	Elective	20
BCGTIL1123A	Carry out decorative mosaic tiling	Elective	40
BCGPAD1133A	Apply/install waterproofing and damp-proofing	Elective	40
BCGTIL1143A	Tile pools and spas	Elective	60
BCGTIL1483A	Lay and repair marble floor and wall/column tiling	Elective	80
BCGCOR1583A	Read and interpret plans	Elective	20
BCGTIL1593A	Lay terrazzo tiles	Elective	60
BSBSBM0012A	Craft personal entrepreneurial strategy	Elective	50

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.

Legend to Unit Code

Example: BCGTIL1092A



KEY: Man – Mandatory; MAS – Masonry; BSB – Business Services (Business); SBM -Small Business Management; ITI - Information & Communication (Information Technology); TIL – Tiling; CAR – Carpentry PAD – Painting & Decorating STW – Steelwork; 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"> Carries out established processes Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> Manages process Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

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

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.

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| 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 SkillsKnowledge

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		
Level 1.	Level 2.	Level 3.
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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 SkillsKnowledge

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

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 SkillsKnowledge

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

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

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
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"> • Carries out established processes • Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> • Manages process • Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> • Establishes principles and procedures • Evaluates and reshapes process • Establishes criteria for evaluation

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 SkillsKnowledge

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

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

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
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 SkillsKnowledge

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

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

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



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:

- key board
- mouse
- scanner
- microphone
- camera

Data:

- textual
- numerical
- graphical

Software systems to include for:

- word processing
- spreadsheet
- internet access

File operations:

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

Files save on:

- network
- magnetic media
- personal PC

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

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

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

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
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 SkillsKnowledge

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

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.

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|---|-------------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | 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 SkillsKnowledge

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

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. 1.2 Preparation requirements identified from drawings, work area and instructions/specifications extract. 1.3 OH&S requirements recognised and adhered to in accordance with the application tasks and workplace environment. 1.4 Appropriate personal protective equipment selected, correctly fitted and used. 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. 1.6 Safety hazards identified and correct procedures used to minimise risk to self and others in accordance with OH&S workplace operations. 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. 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.

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|----|----------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 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:

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

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 SkillsKnowledge

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

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.

BCGCOR0242A: Carry out levelling

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively establish and transfer level from one reference point to another within given tolerance, and applies to individuals working in the construction industry.

Competency Field:

General/Civil Construction

ELEMENT OF COMPETENCY PERFORMANCE CRITERIA

1. Plan and prepare work	1.1	Occupational Health and Safety (OH&S) requirements associated with application tasks and worksite environment recognised and adhered to.
	1.2	Requirements of job identified from drawings and/or instructions.
	1.3	Relevant reduced levels obtained from given drawings/sketches and/or instruction.
	1.4	Appropriate personal protective equipment selected, correctly fitted and used.
	1.5	Levelling equipment and tools selected consistent with needs of job, checked for serviceability and any faults reported to supervisor.
2. Maintain given level or specified slope with boning rods	2.1	Heights of each end of line to be boned are established to levels from given drawings and/or instructions.
	2.2	End boning rods securely fixed to required heights.
	2.3	Heights of intermediate points sighted with boning rods and marked where applicable, to 10mm.
3. Set up and use levelling devices	3.1	Heights to be transferred/established are identified from given drawings/sketches and/or instructions.
	3.2	Level correctly set up for use in accordance to recommendations from manufacturer's operating manual.
	3.3	Levels shot and heights marked and/or recorded to job requirements to +/- 1mm over 10m.

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|----|----------|-----|------------------------------------------------------------------------------|
| 4. | Clean up | 4.1 | All equipment and tools cleaned, maintained and returned to store. |
| | | 4.2 | Levelling equipment placed and secured in manufacturer's provided container. |

RANGE STATEMENT

This unit applies to the use of levelling equipment to read and record levels in accordance with a given level, and to the use of boning rods to maintain or mark a set slope or level line.

Work is to be undertaken working with a partner under limited supervision.

Work applications are simple levelling tasks such as:

- shooting levels for concrete slabs
- recording ground levels at respective corners of a set-out
- recording slab or pad levels for placement of steel columns
- recording or checking levels in shallow drainage excavation
- boning for alignment on ground or in drainage excavation

Levelling equipment or devices include but are not limited to:

- dumpy level
- automatic level
- tilting level
- rotating laser level
- boning rods

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

- worksite environment and safety
- use of tools and equipment
- use of laser equipment
- protective clothing and equipment

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

Personal protective equipment may include:

- overalls
- boots
- jacket
- hard hat
- safety glasses/goggles
- dust masks
- gloves

Associated equipment and tools may include but are not limited to:

- staff
- measuring tape/rule
- string line
- wooden/steel pegs
- laser target and staff
- hammer

Instructions reporting of faults may be verbal or written.

EVIDENCE GUIDE

Competency is to be demonstrated by carrying out safe and effective nominated levelling and boning exercises using any two of the types of levels listed within the range of variables statement related 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 levelling and boning processes
- demonstrate safe and effective operational use of tools, plant and equipment
- indicate particular attention to accurately reading and recording staff readings
- show particular care of equipment in handling, setting up and storing on completion
- interactively communicate with others to ensure safe and effective site operations

(2) Pre-requisite Relationship of Units

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

- BCGCOR0001A Carry out interactive workplace communication
- BCGCOR0041A Carry out measurements and calculations
- BCGCOR0081A Use simple levelling devices

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements
- hand tools
- levelling equipment
- use of levelling devices
- measurement and calculation
- drawings, sketches and instructions
- workplace communications

Skills

The ability to:

- work safely to instructions
- use levelling equipment
- communicate effectively
- read and record measurements
- measure accurately

(4) Resource Implications

The following resources should be made available:

- levelling equipment appropriate to levelling processes
- appropriate tools and associated equipment to support levelling processes
- suitable work area appropriate to levelling activities
- suitable plans/drawing and specifications/instructions

(5) Method of Assessment

Competency shall be assessed while work is being done under 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"> Carries out established processes Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> Manages process Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

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.

BCGTIL1092A: Lay and repair wall and floor tiles

Competency descriptor:

This unit deals with the skills and knowledge required to lay and repair wall and floor tiles, and applies to individuals involved in tile laying 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 tiling operations recognised and adhered to. 1.2 Occupational Health & Safety (OH&S) requirements for workplace environment and preparing for and laying and repairing tiled surfaces identified and adhered to. 1.3 Materials checked for conformity against drawings and specifications and, where applicable, sample tile. 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.
2. Set out tiling job	2.1 Prepare area to be tiled to requirements of specifications. 2.2 Tile work set out to be symmetrical, balanced and involves minimal waste to specifications and Standards for the Installation of Ceramic Tiles. 2.3 Waterproof membrane fitted and laid in wet areas to local government regulations.
3. Cut tiles as required	3.1 Tiles cut without jagged or flayed edges. 3.2 Recess hole or curve cut by hand or machine to shape and size within 1mm. 3.3 Tile jolly-edged to form a mitre so that biscuit is not exposed at the joint.

- 4. Fix wall tiles
 - 4.1 Mortar and/or adhesive prepared, where applicable, and applied to tile/surface in accordance with manufacturer's recommendations.
 - 4.2 Tiles prepared and fixed with pad tiles set to level alignment.
 - 4.3 Horizontal joint checked for straightness and tile edges and surface alignment checked.
 - 4.4 Tiles fixed to alignment maintaining designed pattern to specification.
 - 4.5 Even margins shown around openings, frames and fittings where feasible.
 - 4.6 Bottom and side course cut and fixed to rake, if required.
 - 4.7 Splayed, manufactured, formed or aluminium covers fixed, as required.
 - 4.8 All vertical tiles finished plumb and true to square corners.
 - 4.9 All joints maintained straight and uniform in width with due allowance for tolerance of tile.
 - 4.10 Expansion gaps built in accordance with specifications.
 - 4.11 Mitre joints made, maintaining glazing on mitre with no chips and uniform mitre.
- 5. Grout tile face
 - 5.1 Joints cleaned and prepared to receive grout according to manufacturer's specifications.
 - 5.2 Grout mixed and applied to manufacturer's specifications.
 - 5.3 Tiles cleaned and polished to specifications, removing all dust from surface and joints.
- 6. Fix vertical mosaic sheets
 - 6.1 Surface rendered to manufacturer's specifications and standards for mosaic.
 - 6.2 Sheets pre-grouted if required and paper faced and mesh backed mosaics fixed to background with adhesive.

- 6.3 Adjustments made to ensure spacing uniform and pattern and alignment maintained.
 - 6.4 Area finished with mosaics level to line, if applicable, surface straight and flat and grout finished to specifications.
- 7. Lay floor tiles using screeded mortar
 - 7.1 Floor checked for level/falls square and membranes and reinforcing installed if required.
 - 7.2 Surface prepared free from contaminants and residues to receive screeded mortar.
 - 7.3 Cement mortar prepared to appropriate consistency and floor slurried as per specifications.
 - 7.4 Floor area tiled to specifications. Expansion gaps inserted as specified by manufacturer.
 - 7.5 Grout mixed and applied to job and manufacturer's specifications.
 - 7.6 Finished tile work polished and cleaned to specifications.
- 8. Lay floor tiles using adhesives
 - 8.1 Adhesive correctly matched with tile type according to usage and climatic conditions.
 - 8.2 Surface prepared free from residue and protrusions.
 - 8.3 Adhesive mixed to manufacturer's specifications, where applicable.
 - 8.4 Tiles fixed to manufacturer's specifications and to Building Standards. Expansion gaps left as specified between walls and tiles.
 - 8.5 Grout mixed and applied to clean joints and surface according to manufacturer's specifications.
 - 8.6 Finished tile work polished and cleaned to specifications.
- 9. Fix slate
 - 9.1 Slate prepared by dusting or washing tiles to specifications.
 - 9.2 Colours/characteristics identified as per architect's drawings and specifications.

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|----|-------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| | 9.3 | Slate laid, maintaining bond if applicable, with joints uniform in size and surface as flat as practicable. |
| | 9.4 | Grout or mortar applied and slate surface cleaned and sealed to manufacturer's specifications. |
| 10 | Tile treads, risers, steps and thresholds | 10.1 Rises and goings calculated according to the Building Code or determined from formed concrete steps/stairs. |
| | 10.2 | Steps set out for uniform rise and take even cut on both sides. |
| | 10.3 | Packing or render support fixed where applicable and riser tiles fixed to true alignment. |
| | 10.4 | Treads infill and thresholds fixed in line with the top edge of risers within -1mm. |
| | 10.5 | Grout applied to wet joints and finished flush with tiles to a smooth finish. |
| | 10.6 | Finished tile-work cleaned polished and free of pitted, chipped, cracked or scratched tiles resulting from work. |
| 11 | Repair damaged tile-work | 11.1 Damaged tiles/s carefully removed avoiding damage to surrounding tiles. |
| | 11.2 | Old bedding cleaned and cleared to allow placement of replacement tile. |
| | 11.3 | Replacement tiles selected and cut where applicable to match existing face and pattern. |
| | 11.4 | Tiles fitted and fixed to maintain alignment with joints to uniform spacing. |
| | 11.5 | Grouting carried out and tile face cleaned to specified finish. |
| 12 | Clean up | 12.1 Area cleared to specification. |
| | 12.2 | Waste and unwanted material disposed of safely. |
| | 12.3 | Unused materials stored/stacked. |
| | 12.4 | Tools and equipment cleaned, maintained and stored. |

RANGE STATEMENT

This unit applies to the laying and fixing of floor and wall tiles.

Repair work to include heritage tiling.

Applies to walls, floors steps and includes the following types of tiles:

- ceramic
- terra cotta
- granite
- slate
- mosaics

Surfaces to which tiles may be fixed include:

- plasterboard
- fibre cement sheet
- brickwork
- block-work
- concrete
- rendered face

Tools and equipment may include but are not limited to:

- tile cutters and scribes
- masonry drill bits
- measuring tape/rule
- trowels
- straight edge
- levels
- wet saw
- scrapers

Laying and fixing of ceramic tiles to be in accordance with:

- Standards Adhesives for fixing ceramic tiles
- Standards for the installation of ceramic tiles

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators/dust masks
- knee pads
- ear plugs/muffs
- hard hats

Quality Assurance requirements may include:

- condition of tile
- quality of prepared surfaces
- quality of materials
- setting out procedures
- application procedures
- specified finish
- attention given to specifications of work
- workplace operations and procedures

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

- protective clothing and equipment
- use of tools and equipment
- handling of materials
- hazardous materials
- use of tools and equipment
- working platforms

Methods of fixing tiles include:

- adhesives
- cement mortar
- cement mortar with adhesive additive

EVIDENCE GUIDE

Competence is to be demonstrated by carrying out both wall and floor tiling on both solid and sheet backgrounds using at least three separate types of tiles, one of which is to be mosaics, 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 tiling operations
- select and use appropriate processes, tools and equipment
- apply organisational quality procedures and processes within context of laying and repairing wall and floor tiles
- inspect background surface for conformity with requirements of job and specified adhesives
- set tiles symmetrical and accommodate fittings and fixtures where possible
- mark and cut holes and curves accurately to required locations
- cut tiles to conform to size and shape to ensure consistent joint size is achieved
- ensure tiles finished to line, level, square and flush face
- identify faults and problems that occur and necessary action taken to rectify

(2) Pre-requisites Relationship of Units

Pre-requisites for this unit are:

- BCGCOR0051A Use hand and power tools
- BCGCOR0081A Use simple levelling devices
- BCGTIL0121A Prepare for construction process (wall and floor tiling)
- BCGCOR0212A Prepare surfaces
- BCGCOR0242A Carry out levelling

This unit may be concurrently assessed with:

- BCGTIL1103A Tile corners

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- workplace and equipment safety requirements
- drawings and specifications
- preparation of surfaces
- setting out and levelling
- types of tiles and material characteristics
- adhesives and methods of application
- mortar composition
- hazards associated with solvents, adhesives and cement/epoxy based grouts
- tools and equipment
- cutting of tiles
- finishing techniques
- calculation of material requirements

Skills

The ability to:

- work safely
- interpret drawings and specifications
- organise work
- set-out work area
- use tools and equipment
- lay and fix tiles
- calculate material quantities
- communicate effectively
- cut tiles
- grout

(4) Resource Implications

The following resources should be provided:

- workplace location with surface/s prepared for tasks
- tools and equipment appropriate to tile laying and fixing processes
- tiles and materials appropriate to proposed tasks
- drawings and specifications/documentation relevant to activity

(5) Method of Assessment

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

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

Competency should be assessed under 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 individually 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"> Carries out established processes Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> Manages process Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

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 2	
Solve problems	Level 3	
Use technology	Level 2	

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

BCGTIL1103A: Tile corners

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and lay tiles to corners, and relates to individuals working in masonry/tiling trades 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 tiling operations recognised and adhered to.
		1.2	Occupational Health and Safety (OH&S) requirements for application tasks and workplace environment recognised and adhered to.
		1.3	Materials checked for conformity against 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 and checked for serviceability.
2.	Tile external corners	2.1	Setting out checked for plumb, level and square, within specified tolerance.
		2.2	External corners checked to ensure surface intersections are straight.
		2.3	Curved bead angle trim or tiles fixed so that external return and bead is square and measurements accurate to junction with tiles and set out, where applicable.
		2.4	Tiles fixed with minimum voids in tile bed and fully bedded maintaining alignment according to specifications.
		2.5	Corner maintained square within specified tolerance and finished to specifications.
3.	Tile internal corners	3.1	Internal corner checked to ensure surfaces flat and intersection straight.
		3.2	Tiles fitted, cut where required and fixed to one wall maintaining alignment to set out and specifications.

- 3.3 Tiles fitted, cut where required and fixed abutting adjacent wall tiles to line, set out and specifications.
- 3.4 Joints for abutting tiles made in accordance with designed margin for grouting or for expansion joint, where applicable, according to specifications.
- 3.5 Coved internal wall or wall and floor junctions installed with either coved tiles or coved trim.
- 3.6 Coved tiles or trim fitted and fixed so that line is straight and, where applicable, aligned with set out.
- 3.7 Tiles fixed to cove tiles or trim and finished to alignment and specifications.
- 4. Clean up
 - 4.1 Area cleared to specification.
 - 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 tiling vertical and horizontal surfaces as well as external and internal corners.

Material tiles may include:

- ceramic
- terracotta
- granite
- slate
- mosaic
- ceramic tiles specifically designed for finishes at corners

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators/dust masks
- knee pads

External corners may involve:

- curved plastic bead/trim
- curved external corner tiles
- mitred tiles

Internal corners may involve:

- coved internal corner tiles
- coved plastic bead/trim
- butt joints

Methods of fixing tiles include:

- adhesives
- cement mortar
- cement mortar with adhesive additive

Tools and equipment may include but are not limited to:

- tile cutter and scribers
- masonry drill bits
- measuring tape/rule
- trowels
- straight edge
- levelling equipment
- wet saw
- scrapers

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
- quality of prepared surfaces

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

- workplace environment and safety
- protective clothing and equipment
- use of tools and equipment
- handling of materials
- working platforms
- hazardous materials

Surfaces to which tiles may be fixed include:

- plasterboard
- fibre cement sheet
- brickwork
- blockwork
- concrete
- rendered face

EVIDENCE GUIDE

Competence is to be demonstrated by laying and fixing corner tiles to internal and external wall junctions and between floor and wall junctions using any of the 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 regulations applicable to workplace operations
- 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 laying wall and floor tiles
- inspect background surface for conformity with job requirements and specified adhesives
- give attention to specific positioning of tiles for junctions at corners
- use safe and effective procedures to fix tiles at corners to set out and specified alignment
- identify typical faults and problems that occur and necessary action taken to rectify
- complete of corner tiling aligned to specifications

(2) Pre-requisites Relationship of Units:

Pre-requisites for this unit are:

- Nil

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements
- types of tiles and material characteristics
- drawings and specifications
- Standards for Tiling
- hazards associated with solvents, adhesives and cement/epoxy based grouts
- external and internal corner tiles
- plastic trims for tile work
- substrate preparation
- cutting of tiles
- setting out of grids for laying tiles
- tools and equipment
- adhesives and methods of application

Skills

The ability to:

- work safely
- interpret drawings and specifications
- organise work
- use tools and equipment
- select and effectively use tiles and materials
- measure and calculate quantities
- lay and fix tiles
- communicate effectively

(4) Resource Implications

The following resources should be provided:

- work location set out for tiling
- materials relevant to application tasks
- tools and equipment appropriate to laying and fixing processes
- drawings and specifications/documentation relevant to proposed activity

(5) Method of Assessment

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

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

Competency should be assessed under guidance, checking at various stages of the process and at the 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 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"> Carries out established processes Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> Manages process Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

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 2	
Solve problems	Level 3	
Use technology	Level 2	

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

BCGTIL1113A: Tile curved surfaces

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and lay tiles to curved surfaces, and applies to individuals working in masonry and/or tiling trades 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 tiling operations recognised and adhered to. 1.2 Occupational Health and Safety (OH&S) requirements for application tasks and workplace environment recognised and adhered to. 1.3 Appropriate personal protective equipment selected, correctly fitted and used. 1.4 Tools and equipment selected to carry out processes consistent with job requirements and checked for serviceability. 1.5 Materials checked for conformity against drawings and specifications and in accordance with curvature of wall. 1.6 Safety hazards identified and correct procedures used to minimise risk to self and others.
2. Tile curved wall and floor surfaces	2.1 Extent of curve accurately established from site inspection. 2.2 Level line set out around wall by intermediate marking using either spirit level, water level or levelling equipment. 2.3 Location of tiles set out to determine balanced design and identify cutting requirements, if applicable. 2.4 Template made to form accurate curve line for tiled surface around wall. 2.5 Method of laying tiles determined with identification of location of first tile. 2.6 Mortar and/or adhesive prepared where applicable to manufacturer's specifications.

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- 2.7 Pad tiles fixed to level set out and template curve to specifications.
 - 2.8 Minimum voids ensured in mortar tile beds and tiles fixed level, plumb (wall), flush and square.
 - 2.9 Floor tiles laid to set out grid with perimeter tiles marked and cut accurately to fit curved wall.
 - 2.10 Grout mixed and applied to joints according to specifications, to provide flush and smooth finish.
 - 2.11 Tiled surface polished and finished to specifications.
 - 3. Tile circular volume, wall and arches
 - 3.1 Template set out, cut, accurately positioned and checked to ensure conformity to tile surface for curve.
 - 3.2 Pad tiles accurately positioned and fixed to line, maintaining uniform spacing.
 - 3.3 Tiles accurately marked and cut where applicable and fixed into place, according to specifications.
 - 3.4 Tiles fixed on walls, plumb and maintaining levels and curvature of wall to specifications.
 - 3.5 Tiles fixed to archways, maintaining line and curvature to specifications.
 - 3.6 Grout mixed and applied to joints and tiled surface finished to specifications.
 - 4. Render and mosaic a circular column
 - 4.1 Surface prepared by removing protrusions and cleaning surface for render application.
 - 4.2 Template prepared for diameter profile of column, to specifications.
 - 4.3 Mortar mixed to specifications for render material.
 - 4.4 Render applied evenly to specified thickness and finished to curve to prepared template, to specifications.
 - 4.5 Template prepared for diameter profile of finished tiled face.
 - 4.6 Mosaic tiles fixed to column maintaining even spacing and level finish to specifications.
 - 4.7 Grout mixed and applied to tiled surface and finished to specifications.

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| 5. Clean up | 5.1 Area cleared according to specification free from waste, materials and equipment removed. |
| | 5.2 Waste and unwanted material disposed of safely. |
| | 5.3 Unused materials stored/stacked. |
| | 5.4 Tools and equipment cleaned, maintained and stored. |

RANGE STATEMENT

This unit applies to the tiling of all curved wall, column and arch surfaces

Material tiles may include:

- ceramic
- terra cotta
- marble
- granite
- slate
- mosaics

Tools and equipment may include but are not limited to:

- tile cutters and scribes
- masonry drill bits
- measuring tape/rule
- trowels
- straight edge
- spirit level
- levelling equipment
- light hand roller
- scrapers
- jig saw
- dividers
- file
- power lead
- scaf folding
- squares
- string or chalk line

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirat ors/dust masks
- knee pads

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 regulations and may include:

- workplace environment and safety
- protective clothing and equipment
- use of tools and equipment
- handling of materials
- working platforms and scaffolding
- hazardous materials

Templates may be made from:

- plywood
- hardboard
- sheet metal

Methods of fixing tiles include:

- adhesives
- cement mortar
- cement mortar with adhesives additive

Surfaces to which tiles may be fixed include:

- plasterboard
- fibre cement sheet
- brickwork
- blockwork
- concrete
- rendered face

Safety hazards may include but are not limited to:

- adhesives and their use
- dust
- noise from cutting or nearby work
- working from platforms
- working around curved surfaces

EVIDENCE GUIDE

Competence is to be demonstrated by tiling curved surfaces on both solid and sheet backgrounds.

(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 to carry out tasks
- apply organisational quality procedures and processes within the context of tiling curved surfaces
- inspect background surface for conformity with job requirements and specified adhesives
- set out accurately to ensure lines level and straight
- check to ensure that tile set out is symmetrical and accommodates fittings and fixtures where possible
- accurately set out and prepare profile templates
- cut holes and curves using both manual and mechanical methods
- check cut tile conforms to size and shape to ensure consistent joint size is achieved
- ensure all joints level plumb or square and even as appropriate to the job requirement
- identify typical faults and problems that occur and necessary action taken to rectify
- complete curved tiled surface to specifications
- interactively communicate with others to ensure safe and effective tiling operations

(2) Pre-requisites Relationship of Units:

Pre-requisites for this unit are:

- Nil

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements
- drawings and specifications
- Standards for Tiling
- types of tiles and material characteristics
- hazards associated with solvents, adhesives and cement/epoxy based grouts
- adhesives and methods of application
- mortar composition
- setting out and levelling
- tools and equipment
- templates
- tile installation procedures
- calculation of material requirement

Skills

The ability to:

- work safely
- interpret drawings and specifications
- organise and set out work
- set out levels
- select material
- fit and fix tiles
- prepare accurate templates
- measure and calculate quantities
- use tools and equipment
- communicate effectively

(4) Resource Implications

The following resources should be provided:

- work area prepared for the tiling of curved surfaces
- tiles and associated materials relevant to tiling of curved surfaces
- tools and equipment appropriate to tiling processes
- drawings and specifications/documentation relevant to activity

(5) Method of Assessment

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

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

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 2	
Use technology	Level 2	

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.

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| 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 SkillsKnowledge

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

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

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

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| 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 SkillsKnowledge

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

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&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"> • Carries out established processes • Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> • Manages process • Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> • Establishes principles and procedures • Evaluates and reshapes process • Establishes criteria for evaluation

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

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&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>

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| 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 SkillsKnowledge

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

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

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	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 written.

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

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.

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|----|--------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 SkillsKnowledge

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

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.

BCGCOR0171A: Prepare for demolition process

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively prepare construction process for demolition, and applies to all individuals carrying out initial demolition work in the construction industry.

Competency Field:

General and Construction

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1.	Plan for demolition process	1.1	Quality Assurance requirements of company's construction operations recognised and adhered to.
		1.2	Job requirements identified from drawings/supervisor's instructions.
		1.3	OH&S requirements for demolition tasks and workplace environment recognised and adhered to.
		1.4	Safety hazards identified and correct procedures adopted to minimise risk to self and others.
		1.5	Protection of public and environment identified from demolition plan/instructions.
		1.6	Appropriate personal protective equipment selected according to job requirements, and correctly fitted and used.
		1.7	Tools and equipment selected to instructions consistent with the job requirements, checked for serviceability and any faults reported to supervisor.
		1.8	Protective equipment and materials selected to instructions, consistent with job requirements.
2.	Prepare materials for demolition process	2.1	Materials for protection of others, public and environment selected to instructions.
		2.2	Material preparation carried out to satisfy requirements of protective barriers and construction.
3.	Prepare work area for demolition process	3.1	Activities to be carried out in work area identified from supervisor's instructions.
		3.2	Protective barriers to be erected/constructed identified from drawing details and/or instructions.

	3.3	Barriers, dust blankets and/or safety fencing erected/installed to instructions.
4. Use tools and equipment for construction processes	4.1	Regular hand and power tools suitable for application processes identified from demolition plan/supervisor's instructions.
	4.2	Hand and power tools used safely and effectively in construction processes.
5. Set up plant and equipment for demolition processes	5.1	Position for locating plant and equipment identified in accordance with job instructions.
	5.2	Plant and equipment located and established in position ready for operation.
6. Clean up	6.1	Unused materials stacked/stored.
	6.2	Work area cleared.
	6.3	Waste disposed of using appropriate method to NEPA requirements.
	6.4	Tools and equipment cleaned, maintained and stored.

RANGE OF VARIABLES

This unit applies to the preparation processes carried out prior to and during the demolition of a building.

Construction processes include:

- preparation for protective barriers
- erection of safety fences
- erection of solid panelled fencing/hoarding
- installation of dust blankets
- worksite preparation

Demolition sites include:

- buildings on part of a block
- buildings occupying all of a block
- interiors of buildings

Personal protective equipment may include:

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

Material item may include:

- timber
- blanket sheeting
- plywood
- steel fencing

Tools may include but are not limited to:

- hammers
- hand and power saws
- shovels
- fencing bars
- staplers
- chisels
- picks
- brooms
- cutting knife

Plant and equipment may include but are not limited to:

- air compressor and hoses
- pneumatic picks, rock-breakers
- wheelbarrows
- ladders

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 written.

EVIDENCE GUIDE

Competency is to be demonstrated by carrying out safe and efficient preparation and construction processes in preparing for the demolition of a building using any of the listed range of variables.

(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
- indicate compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during construction and demolition 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

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements
- portable power tools
- hand tools and equipment
- materials
- materials handling
- use of plant and equipment
- drawings and written instructions
- workplace communication

Skills

The ability to:

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

(4) Resource Implications

The following resources should be made available:

- demolition site
- hand and power tools appropriate to construction process
- plant and equipment appropriate to construction and demolition processes
- appropriate materials for construction activities

(5) Method of Assessment

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

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.

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|---|-------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------|
| 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"> Carries out established processes Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> Manages process Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

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

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|----|----------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 SkillsKnowledge

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

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

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
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"> • Carries out established processes • Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> • Manages process • Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> • Establishes principles and procedures • Evaluates and reshapes process • Establishes criteria for evaluation

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.

BCGCOR0232A: Carry out general demolition

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively carry out demolition work of general nature, and applies to individuals working in the demolition of buildings and structures in the building 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 demolition tasks and workplace environment.
		1.2	Site plan/work plan/sketch accurately interpreted and job requirements identified.
		1.3	Appropriate personal protective equipment selected in accordance with job requirements, correctly fitted and used.
		1.4	Tools, plant and equipment selected consistent with job requirements, checked for serviceability and any faults reported to supervisor.
		1.5	Appropriate barricades, hoardings and signage erected where applicable for the protection of public and isolation and identification of site.
		1.6	Disconnection of all previously existing utility services confirmed through supervisor and regulatory authorities.
		1.7	Scaffolding erected to OH&S regulations, where required.
		1.8	Body harness safely used and correctly anchored/secured while working at heights.
2.	Demolish building /structure	2.1	Designated area safely and sequentially demolished under instruction in a team situation.
		2.2	Demolition procedures carried out with safe processes of dismantling/demolishing and removing materials from location.
		2.3	Materials safely handled using appropriate handling techniques in accordance with type of material and OH&S requirements.

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|----|----------|---------------------------------------------------------------------------------------------------|
| | 2.4 | Safety measures introduced to reduce dangerous situations of fire risk, dust and created hazards. |
| | 2.5 | Materials for salvaging identified, safely handled and stacked ready for use. |
| 3. | Clean-up | |
| | 3.1 | Site cleared free from all waste and debris. |
| | 3.2 | Equipment and tools cleaned, maintained and stored. |

RANGE STATEMENT

This unit applies to the demolition of buildings and structures using hand tools and equipment. Work is undertaken in a team situation under supervision where instruction is part of supervisor's direction, either verbal or written.

Types of buildings and structures include:

- single and two storey commercial buildings
- single and two storey residential buildings
- partition walling
- small buildings
- retaining walls and fences

Personal protective equipment may include but is not limited to:

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

Waste and debris separate from main demolished materials may include but are not limited to:

- loose material
- small material items
- empty containers
- cardboard
- paper

Types of construction include:

- brickwork
- block-work
- brick veneer
- timber framed
- light steel framed

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

- operation of demolition sites
- safety of public
- protective clothing
- protective equipment
- safety hazards and hazard control
- working from scaffolding
- use of tools and equipment

Previous existing services may include:

- electricity
- water
- gas
- telephone
- TV cable

Tools, plant and equipment may include but is not limited to:

- pinch bars
- crow bars
- picks
- shovels
- sledge hammers
- wheelbarrows
- scaffolding and ladder
- brooms
- pneumatic picks, rock breakers
- air compressors
- power saws and leads

Reporting of faults may be verbal or written.

Safety measures to reduce dangerous situations may include but are not limited to:

- removal of combustible material
- use of dust suppression blankets
- spraying water
- maintaining clearways for traffic
- removal of demolished material before serious build up
- hazardous materials removed singularly

EVIDENCE GUIDE

Competency is to be demonstrated by working with a team and carrying out the demolition of at least one of the types of buildings 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 demolition and workplace operations
- show compliance with organisational policies and procedures within the context of demolition work
- adopt and carry out correct procedures prior to and during demolition process
- demonstrate safe and effective operational use of tools, plant and equipment
- indicate careful attention given to maintaining safety and carrying out measures to minimise risks
- display correct and safe handling techniques when handling materials
- communicate interactively with others and supervisor to ensure safe and effective demolition operations

(2) Pre-requisite Relationship of Units

- Nil

Competency in this unit may be determined concurrently, based upon integrated project work using these units of competence.

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements
- demolition operations
- protection of public and environment
- hand and power tools
- plant and equipment
- materials relevant to demolition work
- materials handling
- measurement
- drawings, sketches and instructions
- workplace communications
- Statutory Regulatory authority requirements for general demolition
- scaffolding

Skills

The ability to:

- work safely to instructions
- use power tools and hand tools
- use plant and equipment
- handle material
- measure
- demonstrate application of Statutory regulatory authority requirements for general demolition
- communicate effectively

(4) Resource Implications

The following resources should be made available:

- demolition site or simulated site situation
- construction materials relevant to support work for demolition
- hand tools and power tools appropriate to general demolition process
- plant and equipment appropriate to general demolition process
- appropriate protective clothing and equipment

(5) Method of Assessment

Competency should 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, in order to achieve outcomes within time constraints.

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

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

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.

BCGCAR0252A: Erect and strip formwork for concrete work

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively erect, strip and store formwork, and applies to individuals working in the casting of concrete to form concrete structures.

Competency Field:

General Construction

ELEMENT OF COMPETENCY

PERFORMANCE CRITERIA

- | | |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Plan and prepare work | <ul style="list-style-type: none"> 1.1 Quality Assurance requirements of company's construction operations recognised and adhered to. 1.2 Occupational Health and Safety (OH&S) requirements associated with application tasks and workplace environment recognised and adhered to. 1.3 Location(s) of required formwork established from drawings and instructions. 1.4 Formwork components/materials selected to instructions consistent with job requirements. 1.5 Appropriate personal protective equipment selected, correctly fitted and used. 1.6 Tools and equipment selected consistent with job requirements, checked for serviceability and any faults reported to supervisor. 1.7 Fixing/fasteners selected to instruction and used consistent with construction requirements of job. |
| 2. Assist with the erection of formwork | <ul style="list-style-type: none"> 2.1 Work area cleared and surface prepared to instruction for safe erection of formwork. 2.2 Assistance provided with setout of formwork to requirements of drawings and specifications. 2.3 Assistance provided with assembling and erection of formwork to specifications. 2.4 Block outs and cast in-services installed to specified locations. |

- | | | |
|----|----------------|-------------------------------------------------------------------------------------------------------|
| | 2.5 | Debris, sawdust and other waste material safely removed from completed formwork. |
| | 2.6 | Release agent applied to formwork face to manufacturer's specifications. |
| 3. | Strip formwork | |
| | 3.1 | Edge boxing and bracing/strutting support removed carefully, safely and sequentially. |
| | 3.2 | Timber components safely de-nailed, cleaned and stored/stacked for re-use or removal from site. |
| | 3.3 | Steel components cleaned, oiled and stored/stacked to manufacturer's recommendations for maintenance. |
| | 3.4 | Damaged formwork components salvaged or discarded after stripping. |
| 4. | Clean up | |
| | 4.1 | Loose debris and waste material removed and disposed of safely. |
| | 4.2 | Tools and equipment cleaned, maintained and stored. |

RANGE STATEMENT

This unit applies to assisting with the construction, erection or modification of formwork for concrete work in an on-site environment.

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

Formwork type to include:

- slab on ground
- retaining walls

Formwork systems may include:

- timber
- steel
- composite construction

Quality Assurance requirements may include:

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

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

- protective clothing and equipment
- worksite environment and safety
- use of tools and equipment
- emergency procedures

Tools and equipment may include but are not limited to:

- tool belts
- hammer
- power saw
- builders' line
- form oil applicator
- mop
- spanners
- measuring tape
- impact gun
- pinch bars
- hand saws
- cutting knife
- brooms
- shovels

Assisting with assembling and erecting may involve but is not limited to:

- cutting material
- holding material for fixing
- fixing material
- lifting form into place
- assembling system components
- tightening connections
- holding of block outs or cast-in services for securing

Assisting with setting out may involve:

- measuring with a tape
- making marks
- marking material square

Reporting of faults may be verbal or written.

Personal protective equipment may include:

- overalls
- jacket
- hard hat
- safety goggles
- safety boots
- gloves
- ear muffs

FIXING AND FASTENERS MAY INCLUDE:

- nails
- screws
- self tapping screws
- bolts
- patented clips
- brackets

Debris and other waste may include:

- half cut material
- cardboard
- paper

EVIDENCE GUIDE

Competency is to be demonstrated by the safe and effective erection and dismantling of at least two separate types of material systems, from those listed within the range statement, appropriate 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 construction process
- demonstrate safe and effective operational use of tools and equipment
- provide effective assistance to setting out and assembling and erecting formwork
- demonstrate particular attention and care in stripping formwork
- 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
- BCGMAS0101A Carry out concrete work to simple forms

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements
- formwork for concrete
- portable power tools
- hand tools and equipment
- materials related to formwork construction
- materials handling
- measurement and calculation
- drawings/specifications
- levelling equipment
- fixing and fasteners

Skills

The ability to:

- work safely to instructions
- use power tools and hand tools
- handle formwork materials
- select materials appropriate to construction of formwork
- measure relative to construction of formwork
- fix material
- communicate effectively
- use simple levelling equipment

(4) Resource Implications

The following resources should be made available:

- construction materials relevant to construction of formwork
- hand tools and power tools appropriate to construction and stripping processes
- plant and equipment appropriate to construction processes
- suitable work area appropriate to concreting 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.

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

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.

BCGSTW0262A: Carry out steel-fixing

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively fabricate and place concrete reinforcement to formworks and footings, and applies to individuals carrying out steel-fixing work in building and 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 application tasks and workplace environment recognised and adhered to.
		1.3	Reinforcement, type of fixing and locations identified from instructions/reinforcement schedule, job drawings and specifications.
		1.4	Formwork/excavation checked for completion and conformity to receive reinforcement.
		1.5	Appropriate personal protective equipment selected, correctly fitted and used.
		1.6	Tools and equipment selected consistent with job requirements, checked for serviceability and any faults reported to supervisor.
		1.7	Delivered reinforcement checked for correct size type and quantities against reinforcement schedule/details shown in job detail drawings.
2	Prepare for reinforcement placement	2.1	Reinforcement bars cut and bent to required set -out and drawing details.
		2.2	Bars tied to designed configuration from drawings.
		2.3	Reinforcement sheets cut to required sizes, where applicable.
		2.4	Stiffening rods attached to panels to instructions as required to facilitate handling processes.

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|---|----------------------------------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------|
| | | 2.5 | Bar chairs/spacers located to requirements of reinforcement schedule and job drawings. |
| 3 | Place and fix reinforcement | 3.1 | Fabric reinforcement sheets positioned correctly in accordance with approved drawings and schedule. |
| | | 3.2 | Reinforcement bars located according to specification and positioned in accordance with approved drawings and schedule. |
| | | 3.3 | Reinforcement correctly placed using bar chairs, ligatures and spacers according to specification and schedule . |
| | | 3.4 | Reinforcement fabric and/or bars tied and/or welded in correct placement in accordance with approved drawings/job specification and AS1554.3. |
| | | 3.5 | Cast-in items secured to reinforcement to specifications. |
| | | 3.6 | Ends of protruding reinforcement covered and protected in accordance with specifications. |
| 4 | Inspect reinforcement prior to concrete pour | 4.1 | Location and position of ties and/or welded fabric/bar reinforcement checked for accuracy and spacing before concrete placement. |
| 5 | Clean up | 5.1 | Area cleared to specification. |
| | | 5.2 | Waste material removed and placed in job waste bins or rubbish stockpiles. |
| | | 5.3 | Tools and equipment cleaned, maintained and stored. |

RANGE STATEMENT

This unit applies to the fabrication and placement of steel reinforcement to concrete forms and excavations for footings on site.

Forms for concrete structural members and footing excavations may include:

- beam footings
- beams
- slab on ground
- suspended slabs
- columns
- stairs
- pads
- walls

Reinforcing may include:

- deformed bars
- plain rods
- mesh sheets of plain bars
- mesh sheets of deformed bars

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators
- hard hat

Tools and equipment may include but are not limited to:

- bolt cutters
- hacksaw
- wire nippers
- tie wire spool
- welding equipment
- measuring tape/rule
- reinforcement benders
- mesh guillotine
- range of general hand and power tools

Quality Assurance requirements may include:

- preparation of reinforcing
- placement and support
- concrete coverage
- control of handling

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

- protective clothing and equipment
- cutting and handling of material
- working from scaffolding
- using tools and equipment
- worksite environment and safety
- handling of materials

Welding of reinforcement fabric and/or bars to be in accordance with:

- AS1554.3 – 1983 Welding of Reinforcing Steel

Instructions and reporting of faults may be verbal or written, with instructions being part of a supervisor's directions.

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

EVIDENCE GUIDE

Competence is to be demonstrated by the safe and effective placement of reinforcing to at least three (3) of the separate types of structures/members/footings listed within the 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
- show compliance with organisational policies and procedures
- select and use appropriate processes, tools and equipment
- apply organisational quality procedures and processes within the context of fixing steel reinforcing
- check materials for conformity with specifications and job requirements
- Identify and follow assembly location and placement sequence
- demonstrate safe and effective use of tools and equipment and handling of materials
- place and tie/weld reinforcement to specification
- interactively communicate with others to ensure safe and effective operations in fixing the reinforcing

(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 SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements
- formwork for concrete
- portable power tools, hand tools
- plant and equipment
- materials relevant to steel-fixing
- materials handling
- measurement and calculation
- drawings and specifications
- reinforcement schedule
- appropriate steel-fixing procedures and legislative requirements

Skills

The ability to:

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

(4) Resource Implications

The following resources should be made available:

- reinforcement materials appropriate to construction process
- hand tools and power tools appropriate to steel fixing process
- plant and equipment appropriate to steel fixing process
- suitable formwork or excavation appropriate to construction process

(5) Method of Assessment

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

Competence 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 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"> Carries out established processes Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> Manages process Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

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 2	
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.

BCGCAR0282A: Use explosive power tools (EPT)

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively set up and use explosive power tools, and applies to individuals that use fasteners in the construction processes.

Competency Field:

General/Civil 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 & Safety requirements associated with application tasks and workplace environment recognised and adhered to.
		1.3	Job requirements assessed to determine access and appropriate fastener and charge to suit material and base to be fixed.
		1.4	Explosive power tools, attachments and equipment selected consistent with requirements of job, checked for serviceability and any faults reported to supervisor.
		1.5	Appropriate personal protective equipment selected, correctly fitted and used.
		1.6	Safety hazards identified and correct procedures used to minimise risk to self and others.
		1.7	Scaffolding erected, where applicable, and according to OH&S requirements.
		1.8	Explosive power tool operations carried out in accordance with manufacturer's recommendations.
2.	Set out for fasteners	2.1	Material or base set out for location of fasteners in accordance with detailed drawings and specifications.
		2.2	Minimum distances from edge of material adhered to in accordance with manufacturer's specifications.

-
- 2.3 Material located and temporarily held or fixed into designed position of detailed drawings.
 - 3. Use explosive power tools
 - 3.1 Fastener selected to requirements of job.
 - 3.2 Charge selected to assess requirements for material, base and penetration.
 - 3.3 Attachments and/or accessories installed to explosive power tool in accordance with manufacturer's specifications.
 - 3.4 Explosive power tool checked for operation to manufacturer's specifications.
 - 3.5 Fastener and charge located in explosive power tool to manufacturer's specification.
 - 3.6 Personal protective equipment fitted and worn in accordance with manufacturer's recommendations.
 - 3.7 Explosive power tool operated safely and fastener fixed into place.
 - 3.8 Fastening penetration checked and determined for appropriate depth into material.
 - 3.9 Power regulating device adjusted for conditions where required.
 - 3.10 Misfire procedures carried out where required to manufacturer's recommendations.
 - 4. Clean up
 - 4.1 Temporary holding/fixing removed without damage to material.
 - 4.2 Explosive power tool cleared, attachments removed and tool and attachments cleaned.
 - 4.3 Charges stored in designated container in accordance with requirement and used charges recorded.
 - 4.4 Unused fasteners, explosive power tool and attachments stored in carry case according to manufacturer's recommendations.
 - 4.5 Area cleared and waste material disposed of safely.

5. Maintain explosive power tool and kit	5.1	Safety features of tool checked for serviceability in accordance with manufacturer's operating manual.
	5.2	Tool cleaned and lubricated to manufacturer's recommendation.
	5.3	Periodic maintenance service carried out to manufacturer's specifications.
	5.4	Log book checked and maintenance recorded to manufacturer's recommendations.
	5.5	Diminished stocks of charges and fasteners replenished to designed effectiveness of power tool kit.

RANGE STATEMENT

This unit applies to both direct action and indirect action explosive powered fastening tools.

Use of these tools is to be in accordance with relevant Statutory Legislation requirements and:

- Recommended procedures for the usage of Explosive-Powered Hand held Fastening Tools, Fasteners and Explosive Charges

Tools used to fasten materials or fix fasteners to bases of:

- concrete
- masonry
- steel

Quality Assurance requirements may include:

- workplace operations and work procedures
- safety requirements
- quality of materials
- application relevant to specifications of work

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

- workplace environment and safety
- use of explosive power tools
- isolation of working areas
- use of tools and equipment
- protective clothing and equipment
- working from scaffolding
- emergency procedures

Personal protective equipment is to incorporate requirements of:

- Acoustics – Hearing Protection
- Eye Protection for Industrial Application

In addition to ear plugs/muffs and safety glasses/goggles, other personal protective equipment may include:

- gloves
- boots
- hard hat
- overalls
- dust mask/respirator

Safety hazards may include but are not limited to:

- obstacles close to operation location
- other activities within vicinity
- limited space

Reporting of faults may be verbal or written.

EVIDENCE GUIDE

Competency is to be demonstrated by carrying out the safe and effective operational use of an EPT in application to the various types of bases listed within the range of variables 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 explosive power tools and workplace operations
- show compliance with organisational policies and procedures including Quality Assurance requirements
- carry out correct procedures prior to and during application of fixing/fastening process
- demonstrate safe and effective operational use of explosive power tools and equipment
- show correct interpreting of manufacturer's manual and reporting procedures
- 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 relevant units based upon integrated project works relative to the work orientation.

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

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements including relevant OH&S statutory regulations
- explosive power tools
- hand tools and equipment
- materials relevant to the operation of (EPT's)
- measurements and calculations
- drawings and specifications
- Quality Assurance
- operational procedures in accordance with manufacturer's specifications maintenance of equipment
- fixing of materials

Skills

The ability to:

- work safely to instructions
- use hand and power tools
- measure relative to fixing of materials
- demonstrate operational procedures for EPT
- communicate effectively
- identify drawing details relevant to operation of Explosive Power Tools (EPT)
- maintain accurate records

(4) Resource Implications

The following resources should be made available:

- explosive power tool and complete kit
- general construction materials relevant to operation applications of EPT
- hand and power tools and supportive equipment appropriate to operation applications of EPT
- suitable work area appropriate to operation applications of EPT
- manufacturer's manual of operations

(5) Method of Assessment

Competency should be assessed while work is carried out under direct supervision.

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

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 2	
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.

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

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

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|------------------|-----|---------------------------------------------------------------------------------------------------------------------|
| | 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 SkillsKnowledge

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

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.

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.

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|----|----------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 SkillsKnowledge

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

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 SkillsKnowledge

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

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

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|---|--------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |

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|---|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | 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 SkillsKnowledge

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

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.

BCGMAS1462A: Construct straight masonry block-work

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and construct concrete block masonry work, and applies to individuals working in masonry trades 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 for workplace environment and constructing masonry block-work identified and adhered to.
		1.3	Material and quantity requirements determined from job drawings and specifications.
		1.4	All work to comply with relevant Building Code for Masonry.
		1.5	Appropriate personal protective equipment selected, correctly fitted and used.
		1.6	Tools and equipment selected consistent with the requirements of constructing concrete masonry block-work, checked for serviceability and any faults reported to supervisor.
		1.7	Safe working area established and isolated, where applicable.
2	Set out block-work	2.1	Location and structural details of block-work determined from job drawings and specifications.
		2.2	Block-work set out to location to dimensions from job drawings and specifications.
3	Construct masonry block-work	3.1	Concrete blocks laid using mortar to job specifications and the relevant Building Codes for building block-work.
		3.2	First course of block-work laid to set out line and level.

- 3.3 Door and window openings located in block -work according to job specifications.
 - 3.4 Remaining courses of block-work laid straight and plumb to job specifications
- 4 Place reinforcement and concrete
 - 4.1 Horizontal reinforcing steel-bars placed according to job specifications.
 - 4.2 Vertical reinforcing steel-bars placed according to job specifications with jointing/splicing made to engineer's specifications.
 - 4.3 Concrete mixed to specifications, placed and compacted in hollow block-work in line according to specifications.
 - 4.4 Openings constructed and lintels formed.
 - 4.5 Walls are straight and true in plumb, line and level within tolerances set out.
 - 4.6 Vents, expansion joints and weep-holes installed, where required, to job specifications.
 - 4.7 Perpendicular joints are laid to vertical line.
 - 4.8 Scaffolding erected as required in accordance with job requirements and OH&S regulations.
 - 4.9 Block-work raked/ruled/struck to job specifications.
- 5 Install belt beam/lintel
 - 5.1 Details of belt beam and reinforcement identified in accordance with job design and specifications.
 - 5.2 False work constructed to job requirements to support lintel formwork over opening.
 - 5.3 Mortar fins of bond blocks where used removed carefully to manufacturer's requirements.
 - 5.4 Reinforcement placed into belt beam/formwork formwork and supported, providing correct cover in accordance with job specifications.

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|---|-----|-----------------------------------------------------------------------------------------------------------------------|
| | 5.5 | Belt beam formwork checked for placement and alignment in accordance with job drawings and engineer's specifications. |
| | 5.6 | Concrete mixed, placed into belt beam/lintel formwork and consolidated to engineer's specifications. |
| 6 | 6.1 | Block-work face cleaned free of unwanted mortar and concrete. |
| | 6.2 | Formwork for belt beam safely removed when the design strength of concrete has been achieved. |
| | 6.3 | Supports within openings removed safely once the lintel design strength has been achieved. |
| | 6.4 | Area cleared and waste material disposed of safely. |
| | 6.5 | Tools and equipment cleaned, maintained and stored. |

RANGE STATEMENT

This unit covers all hollow block masonry units manufactured of lightweight materials or concrete, which incorporate infilling of hollows to provide bonding strength to construction.

Reinforcement of structure can be either or both vertical or horizontal reinforcing.

This unit covers all straight, square and plumb block - work construction, which includes: Quality Assurance requirements may include:

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • walls • columns • attached piers • belt beams and lintel • incorporation of wall ties and reinforcement | <ul style="list-style-type: none"> • workplace operations and procedures • quality of materials • control of handling procedures • use and maintenance of equipment • attention to work specifications • shape and quality of masonry blocks • specification of mortar mix • specified joint finish |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

- workplace environment and safety
- protective clothing and equipment
- use of tools and equipment
- handling of materials
- working platforms and scaffolding
- safety hazards

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- dust masks/respirators
- hard hat
- overalls

Tools and equipment may include but are not limited to:

- measuring tape/rule
- hammers
- spirit level
- dumpy level
- concrete mixer
- wheelbarrows
- shovels
- masonry saw
- angle grinder
- trowels
- straight edges
- plumb rule
- jointing tools
- string line
- line pins
- line blocks
- scaffolding
- mortar boards
- buckets
- mason's square
- adjustable steel props
- timber beam bearers
- hand saw
- claw hammer

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 the construction of a straight masonry block-work wall, including return corners and belt beam or lintel.

(1) Critical Aspects of Evidence

Competence is to be observed in the following critical aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to worksite and masonry block laying operations
- select and use appropriate processes, tools and equipment for masonry block laying
- apply organisational quality procedures and process within context of masonry block construction
- set out wall to the requirements of job drawings
- select blocks and mortar consistent within specifications for job
- erect scaffolding in accordance with OH&S regulations
- identify typical faults and problems that occur and necessary action taken to rectify
- interactively communicate with others to ensure safe and effective work procedures
- complete construction of masonry block-work wall to job drawings and specifications
- placement of reinforcement

(2) Pre-requisite Relationship of Units

- BCGCOR0031A Draw and interpret simple drawings
- BCGCOR0071A Erect and dismantle restricted height scaffolding
- BCGCOR0081A Use simple levelling devices
- BCGMAS0101A Carry out concrete work to simple forms
- BCGMAS0151A Prepare for construction process (brick/block-Laying)
- BCGCOR0242A Carry out levelling

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements including regulations, codes and standards'
- block expansion
- control and articulation joints
- mortar mix composition
- range of mortar additives including plasticisers and their application
- Building Code and Standard for Masonry Work
- materials for constructing masonry block-work walls
- tools and equipment suitable for masonry block-work construction
- measuring and levelling

Skills

The ability to:

- work safely
- read and interpret drawings
- interpret documentation from a wide range of sources
- use tools and equipment
- set out work
- communicate effectively
- organise work
- lay masonry block-work
- erect restricted height scaffolding

(4) Resource Implications

The following resources should be provided:

- workplace location
- tools, plant and equipment appropriate for constructing masonry block-work walls
- scaffolding
- materials appropriate for masonry block-work construction
- drawings and specification relevant to tasks
- appropriate size belt beam lintel reinforcement cage

(5) Method of Assessment

Competency should be assessed through direct observation of practical application 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 conducted 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"> Carries out established processes Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> Manages process Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

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 2	

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

BCGMAS0803A: Install glass block work

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and install glasswork building blocks, and applies to individuals working in laying building blocks in the 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 OH&S requirements for workplace environment and preparing and installing glass block work recognised and adhered to. 1.3 Materials and quantity requirements determined from job drawings, specifications and manufacturer's recommendations. 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. 1.7 Adhesive checked for manufacturer's recommendations and conformity to specifications. 1.8 Location and dimensions of block work determined from job drawings.
2. Set out and prepare base	2.1 Area correctly located, base and abutting surfaces checked for level/plumb and finished to specification. 2.2 Surface for block work checked for clean and dry and prepared according to manufacturer's and job specification. 2.3 Wall or section of block work set out to base details from job drawings.
3. Install glass blocks	3.1 Adhesive applied according to manufacturer's recommendations and job specifications. 3.2 Spacers and connectors located and positioned in accordance with manufacturer's and job specifications.

- 3.3 Glass blocks laid to set out line, plumb, level and to designed pattern according to specifications.
- 3.4 Scaffolding erected, where required, in accordance with OH&S regulations.
- 3.5 Block work completed to job drawings and specifications.
- 3.6 Joints tool finished to achieve specified finish.
- 4. Clean-up
 - 4.1 Excess adhesive removed and block work face cleaned with manufacturer's approved cleaning fluid.
 - 4.2 Area cleared and waste material disposed of safely.
 - 4.3 Unused materials sealed and stored/stacked.
 - 4.4 Tools and equipment cleaned, maintained and stored.

RANGE STATEMENT

This unit applies to block work constructed using glass blocks with silicone type adhesive or sealant.

Glass block work may also be installed using cement mortar joints.

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

- workplace environment and safety
- protective clothing and equipment
- use of tools and equipment
- handling of materials
- working platforms and scaffolding
- use of adhesives

Safety hazards may include:

- noise from nearby work
- other work personnel
- obstructions to access
- barricades
- inadequate lighting
- height consideration

Tools and equipment may include but are not limited to:

- measuring tape/rule
- string lines
- trowels
- caulking gun
- knives
- jointing tools
- spirit level
- shovel
- concrete mixer
- rubber mallet
- straight edge
- scaffolding
- wheelbarrow

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

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators

EVIDENCE GUIDE

Competency is to be demonstrated by laying glass blocks using both cement mortar and flexible sealant/adhesive.

(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 processes within the context of installing glass block work
- check installation area for size, plumb, level obstructions, location and safety hazards
- prepare surfaces for the application of jointing materials in accordance with manufacturer's specifications
- maintain bond/pattern of block work consistent with drawings and specifications
- maintain alignment, level of courses and plumb
- identify typical faults and problems that occur and necessary action taken to rectify
- interactively communicate with others to ensure safe and effective work procedures
- complete block work installation to specifications

(2) Pre-requisite Relationship of Units

- Nil

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- workplace and equipment safety requirements
- working drawings and specifications
- glass block work construction
- hazards associated with solvents and adhesives used with glass blocks
- expansion joints for walls using clay, concrete or glass bricks/blocks
- mortar mix specification
- materials
- tools and equipment
- calculation of material requirements

Skills

The ability to:

- work safely
- interpret drawings and specifications
- organise work
- use tools and equipment
- communicate effectively
- calculate material quantities

(4) Resource Implications

The following resources should be provided:

- workplace location
- tools and equipment appropriate to installation processes
- scaffolding applicable to installation where required
- glass blocks and associate materials
- drawings and specifications relevant to activity

(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 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"> • Carries out established processes • Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> • Manages process • Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> • Establishes principles and procedures • Evaluates and reshapes process • Establishes criteria for evaluation

Collect, analyse and organise information	Level 3	To measure self-performance
Communicate ideas and information	Level 1	With members of the work team
Plan and organise activities	Level 2	For self
Work with others and in team	Level 1	In completing scheduled tasks
Use mathematical ideas and techniques	Level 2	As an aid to measure and schedule tasks
Solve problems	Level 2	As an aid to self-development
Use technology	Level 2	To manage scheduling and completion of tasks

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

BCGTIL0863A: Lay terrazzo

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and lay terrazzo, and applies to individuals working in masonry and tiling trades 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 & safety (OH&S) requirements for application tasks and workplace environment recognised and adhered to. 1.3 Drawings and specifications interpreted so that location of terrazzo identified and material requirements determined. 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. Identify materials	2.1 Appropriate materials selected to match specifications for colour and size of marble chips.
3. Prepare floor	3.1 Floor cleaned of residue and slurried to achieve bonding with substrate.
4. Produce terrazzo work	4.1 Blue stone screenings, sand and cement mixed to specification to ratio of 3, 2, 1 and water. 4.2 Base mix placed, spread and screeded to correct falls or level, where applicable, to specification. 4.3 Terrazzo mixed correctly, 1/2 part marble chips to 1 part of white cement. 4.4 Even coat to 15mm depth applied over the entire screeded floor to specifications. 4.5 Heavy roller applied to surface to specifications to obtain flat, level floor area.

- | | | |
|----|---------------------------------|-------------------------------------------------------------------------------|
| | 4.6 | Drying time of 24 hours allowed prior to further applications. |
| 5. | Grind and polish marble surface | 5.1 Surface ground all over to expose marble using portable grinding machine. |
| | | 5.2 Voids or holes filled with like colour cement mortar to specifications. |
| | | 5.3 Surface polished and finished flat and blemish free. |
| 6. | Clean up | 6.1 Area cleared of waste, materials and equipment. |
| | | 6.2 Waste and unwanted material disposed of safely. |
| | | 6.3 Unused materials stored. |
| | | 6.4 Tools and equipment cleaned, maintained and stored. |

RANGE STATEMENT

This unit applies to the preparation and construction processes carried out in preparing for and laying of terrazzo.

Materials used in the laying of terrazzo may include:

- marble
- granite
- basalt
- sand
- coloured cement
- epoxy terazzo

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

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

This unit applies to the laying of terrazzo to:

- floors
- steps
- stairs
- landings

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

Tools plant and equipment may include but are not limited to:

- measuring tape/rule
- shovel
- spirit level
- concrete mixer
- screed boards
- wheelbarrow
- roller
- portable grinding machine
- polisher
- power leads

Personal protective equipment may include:

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

Hazards may include but are not limited to:

- limited access to application area
- barricades
- other work personnel
- excessive noise nearby
- dust
- fumes

EVIDENCE GUIDE

Competency is to be demonstrated by providing a terrazzo finish to a floor 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
- indicate compliance with organisational policies and procedures
- select and use of appropriate processes, tools and equipment to carry out tasks
- apply organisational quality procedures and process within the context of laying terrazzo
- adapt and use safe and effective procedures to prepare/prime surface for terrazzo base
- select and proportion materials for composition mix
- adopt and apply safe and effective procedures to lay and screed base mix
- apply topping mix to specification
- apply safe and effective procedures in grinding and polishing surface to finish specification
- identify typical faults that occur and corrective action taken to rectify
- interactively communicate with others to ensure safe and effective workplace operations

(2) Pre-requisite Relationship of Units

Pre-requisites for this unit are:

- BCGCOR0061A Use small plant and equipment
- BCGCOR0081A Use simple levelling devices
- BCGMAS0101A Carry out concrete work to simple forms
- BCGCOR0212A Prepare surfaces
- BCGMAS1053A Finish stone

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements including relevant statutory regulations, codes and standards
- drawings and specifications
- structure of terrazzo
- method of applying terrazzo
- materials
- Quality Assurance
- use of plant and equipment
- placement and compaction of concrete
- handling of materials
- worksite communication

Skills

The ability to:

- work safely
- read and interpret drawings and specifications
- organise work
- handle materials
- select material
- use plant and equipment
- calculate materials
- place concrete
- communicate effectively

(4) Resource Implications

The following resources should be made available:

- general construction materials relevant to application of terrazzo work
- plant and equipment appropriate to application of terrazzo work
- suitable work area appropriate to application of terrazzo work
- drawings and specifications relevant to proposed activity

(5) Method of Assessment

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

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 the completion of the activity against performance criteria and specifications.

(6) Context of Assessment

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

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

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 2	
Solve problems	Level 3	
Use technology	Level 2	

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

BCGMAS0943A: Carry out special finishes to concrete

Competency Descriptor:

This unit deals with the skills and knowledge required to carry out special finishes to concrete surface, and applies to individuals working in masonry trades 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 concreting operations recognised and adhered to. 1.2 OH&S requirements for application to tasks and workplace environment, recognised and adhered to. 1.3 Job material and equipment requirements determined from drawings and specifications. 1.4 Safety and protection requirements determined for work personnel, public and environment. 1.5 Appropriate personal protective equipment selected, correctly fitted and used. 1.6 Tools and equipment selected to carry out processes consistent with job requirements and checked for serviceability.
2. Carry out false brickwork finish	2.1 Concrete poured, compacted and screeded to specification. 2.2 Stencil for brickwork finish prepared so that any lapping will maintain alignment and bond. 2.3 Stencil carefully laid on screeded surface to specifications ensuring alignment, bond and flat. 2.4 Prepare dry topping mix of colour, stone-dust and cement and sprinkle evenly over surface to specifications. 2.5 Surface finished with wood or steel float to consistent texture in accordance with specifications. 2.6 Critical time of lifting stencil carried out at setting time to manufacturer's recommendations.
3. Carry out slate and pattern paving	3.1 Concrete poured, compacted and screeded to specifications. 3.2 Method of applying pattern determined in accordance with designed finish and specifications. 3.3 Roller or stamped pattern equipment checked for cleanliness and serviceability.

- 3.4 Layout design planned and initial starting point determined to specifications and design.
- 3.5 Base colour and topping dust prepared and sprinkled evenly over surface to specifications.
- 3.6 Base colour floated into surface to specification.
- 3.7 Random colour(s), where applicable, sprinkled onto surface at random locations to create slate type colourings.
- 3.8 Release agent prepared and sprinkled evenly over whole surface to specifications.
- 3.9 Roller and stamp used prior to initial set to create designed pattern and surface effect to specification.
- 3.10 Construction joints cut into roller applied finish after setting, where applicable, to specification.
- 4. Carry out exposed aggregate finish
 - 4.1 River gravel aggregate incorporated in concrete mix to specification.
 - 4.2 Concrete poured, compacted and screeded to specifications.
 - 4.3 Following set of concrete, strong water jet and stiff brush applied to brush and wash fines from surface to expose aggregate.
 - 4.4 Exposed aggregate left clean and free to designed effect and specifications.
- 5. Cure concrete
 - 5.1 Curing application applied to concrete to specifications following set.
 - 5.2 Curing maintained to period in accordance with specifications.
- 6. Clean up
 - 6.1 Area cleared of waste and equipment.
 - 6.2 Waste and unwanted material disposed of safely.
 - 6.3 Tools and equipment cleaned, maintained and stored.

RANGE STATEMENT

This unit applies to special finishes to concrete surfaces providing a distinct featured face finish.

Special finishes can be obtained on both horizontal and vertical faces, the latter being applied following the stripping of formwork shutter with textured finish provided off form.

Special finishes may include the following:

- false brickwork stencil finish
- false slate or similar patterned paving finish
- exposed aggregate finish
- other special finishes applied with a trowel using concrete as a base material
- off form textured finish
- coloured concrete

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

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

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

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators/dust masks
- cap or hat

Tools and equipment may include but are not limited to:

- trowels
- power trowels
- floats
- brooms
- hoses
- rollers
- stencils
- shovels
- wheelbarrows
- concrete mixers

EVIDENCE GUIDE

Competency is demonstrated by finishing concrete in at least three of the types of finishes listed within the 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
- select and use appropriate processes, tools and equipment to carry out tasks

Critical Aspects of Evidence (Cont'd)

- apply organisational quality procedures and process within the context of finishing concrete
- accurately align stencil/roller to provide continuity of pattern
- adopt and use safe and effective procedures to spread colour
- finish concrete surface in accordance with design to specifications
- take measures to protect concrete surface from either pedestrian or vehicular traffic and weather
- identify typical faults and problems that occur and necessary action taken to rectify
- interactively communicate with others to ensure safe and effective workplace operations

(2) Pre-requisites Relationship of Units

- Nil

(3) Underpinning Knowledge and Skills

Kn	<u>Knowledge</u> Knowledge of:	<u>Skills</u> The ability to:
	<ul style="list-style-type: none"> • workplace equipment safety requirements including relevant statutory regulations and codes • concrete and its characteristics • placing and finishing of concrete • mortar mix composition • range of mortar additives including plasticiser/s and/or application • control and articulation of joints • Building Standards for Concrete Structures • concrete finishing techniques • specifications • tools and equipment 	<ul style="list-style-type: none"> • work safely • organise and set out work • use tools and equipment • select materials • handle materials safely • communicate effectively

(4) Resource Implications

The following resources should be provided:

- work location appropriate to process of applying special finishes to concrete
- tools and equipment appropriate to finishing processes
- construction materials appropriate to process of special finishes to concrete work
- appropriate communication of documentation relevant to task

(5) Method of Assessment

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

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

Competency should be assessed under general guidance, checking at various stages of the process and at the 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"> • Carries out established processes • Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> • Manages process • Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> • Establishes principles and procedures • Evaluates and reshapes process • Establishes criteria for evaluation

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 3	
Solve problems	Level 3	
Use technology	Level 2	

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

**BCGTIL1123A: Carry out decorative mosaic tiling**

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and carry out decorative mosaic tiling, and applies to individuals working in masonry and/or tiling trades of 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 tiling operations recognised and adhered to. 1.2 Occupational Health and Safety (OH&S) requirements for application tasks and workplace environment recognised and adhered to. 1.3 Design and scope of mosaic work determined from job drawings and specifications. 1.4 Materials and quantities determined from job drawings and specifications. 1.5 Appropriate personal protective equipment selected, correctly fitted and used. 1.6 Tools and equipment selected to carry out processes consistent with job requirements and checked for serviceability.
2. Set out and prepare materials for mosaic	2.1 Design pattern produced on paper to full size and details checked and sharpened to shape. 2.2 Size of tile chosen in accordance with mosaic design. 2.3 Colour co-ordination selected as close as practical to specified colour samples. 2.4 Paper pattern laid out face down on flat board or table and taped firmly at edges.
3. Form mosaic design on paper pattern	3.1 Mosaic tiles cut to designed regular size in accordance with colour design. 3.2 Shaped and smaller mosaic tiles marked to fit pattern and cut to shape.



- 3.3 Paper glue applied to each tile and tile fitted to pattern maintaining designed spacing.
 - 3.4 Process continued to complete mosaic design.
 - 4 Fix mosaic to curved surfaces
 - 4.1 Extent of curve is established from site inspection.
 - 4.2 Surface is prepared for the application of mortar/ adhesive and datum line is set out around wall.
 - 4.3 Tiles are set out to determine design balance and to identify any cutting requirement.
 - 4.4 Template is made to form the finished curve of the tiled surface.
 - 4.5 Tile laying method is determined, and the location of the first tile is identified.
 - 4.6 Render is mixed to specifications where applicable.
 - 4.7 Substrate surfaces are rendered to specified thickness and finished to prepared template where applicable.
 - 4.8 Mortar and/or adhesive is/are prepared to manufacturers' specifications.
 - 4.9 Tiles are fixed level, plumb, flush and square in accordance with specifications.
 - 4.10 Horizontally laid tiles are set out to grid with perimeter tiles, marked and cut to fit curve lines
 - 5 Fix mosaic to a circular column
 - 5.1 Surface is for prepared and cleaned render/adhesive application.
 - 5.2 Template is prepared for the diameter profile of column.
 - 5.3 Render/adhesive is mixed to specifications.
 - 5.4 Render is applied to specified thickness and finished to prepared template where applicable.
 - 5.5 Template is prepared for diameter profile of finished tiled face.
 - 5.6 Mosaic sheet or tiles are fixed to column maintaining an even spacing and plumb and level finish, to specification.



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| 6 | Prepare substrate to fix mosaic pattern | 6.1 | Brick or masonry surfaces rendered to specifications. |
| | | 6.2 | Plasterboard and/or cement sheet surface cleaned free of dust. |
| | | 6.3 | Location of mosaic set out to dimensions from job drawings and specifications or marked directly onto surface by tracing full size set out. |
| 7 | Fix mosaic to designed location | 7.1 | Appropriate colour adhesive/ grout chosen to ensure light coloured tiles not darkened by adhesive/ grout. |
| | | 7.2 | Large mosaic carefully cut into smaller sheets of manageable size. |
| | | 7.3 | Surface is prepared for the application of adhesive. |
| | | 7.4 | Area for mosaic set out to specification. |
| | | 7.5 | Adhesive applied to set out area and sheets located in appropriate position related to overall design. |
| | | 7.6 | Separated mosaic pieced together to form total mosaic with lines consistent to design. |
| | | 7.7 | Paper pattern washed off carefully prior to adhesive final set and adjustments made to ensure mosaic lines and spaces consistent. |
| | | 7.8 | Surface finished so that face of tiles flush and surface flat, to specification where applicable. |
| 8 | Grout tile face | 8.1 | Tiled face cleaned free of dust and adhesive to prepare for grouting. |
| | | 8.2 | Grout mixed and applied to mosaic surface to manufacturer's specifications. |
| | | 8.3 | Finished mosaic surface cleaned and polished with dry cloth according to specifications. |
| 9 | Clean up | 9.1 | Area cleared free of waste materials and all equipment removed. |



- 9.2 Waste and unwanted material disposed of safely.
- 9.3 Unused materials stored/stacked.
- 9.4 Tools and equipment cleaned, maintained and stored.

RANGE STATEMENT

This unit applies to decorative mosaic tiling which may be formed by gluing mosaic tiles to a paper pattern either face up or face down or directly fixing into place on a wall or board, later to be hung or fixed to a wall.

Mosaic designs are produced from provided designs by enlarging through photocopying processes until actual size is achieved. Actual design pattern involves the joining of a number of sheets.

Mosaic tiles may be fixed into place by the use of an adhesive or directly bedded onto a mortar or rendered base.

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
- quality of prepared surfaces

OH&S requirements to be in accordance with the Building Operations Works of Engineering Construction Safety, Health and Welfare regulations and may include:

- workplace environment and safety
- protective clothing and equipment
- use of tools and equipment
- handling of materials
- working platforms and scaffolding
- hazardous materials

Surfaces to which tiles may be fixed include:

- plasterboard
- fibre cement sheet
- brickwork
- block work
- concrete
- rendered face

Methods of fixing tiles include:

- adhesives
- cement mortar
- cement mortar with adhesives additive



Tools and equipment may include but are not limited to:

- tile cutters and scribes
- masonry drill bits
- measuring tape/rule
- trowels
- straight edge
- levelling equipment
- light hand roller
- scrapers
- shovel
- concrete mixer
- grout float
- sponge

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators/dust masks
- knee pads

EVIDENCE GUIDE

Competence is to be demonstrated by carrying out mosaic tiling applications to a given design using either of the two methods outlined in the range statement.

(1) Critical Aspects of Evidence

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

- demonstration of compliance with Occupational Health and Safety regulations applicable to workplace operations
- indication of compliance with organisational policies and procedures
- selection and use of appropriate processes, tools and equipment to carry out tasks
- application of organisational quality procedures and process within context of laying and fixing mosaic wall and floor tiles
- accurate reproduction of design to specified dimensions
- inspection of background surface for conformity with job requirements and specified adhesives
- accurate interpretation and selection of tile sizes, shapes and colours
- adoption and use of safe and effective procedures to cut tiles to shape
- ensuring that each cut tile conforms to shape and colour to match design
- accurate set out location of mosaic design either by dimensional limits or designed shape and lines
- accurate production of design to surface location
- identification of typical faults and problems that occur and necessary action taken to rectify
- interactive communication with others to ensure safe and effective installation operations
- completion of mosaic to design specifications

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

- Nil

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements
- drawings and specifications
- Building Standards for Tiling
- design reproduction methods
- mosaic application methods
- hazards associated with solvents, adhesives and cement/epoxy based grouts
- adhesives and methods of application
- mortar composition
- setting out and proportioning
- tools and equipment
- substrate preparation
- cutting of tiles
- scaffolding
- grouting and finishing of tile work
- calculate material requirement

Skills

The ability to:

- work safely
- interpret drawings and specifications
- organise work
- reproduce design drawings
- select materials to suit design
- cut tiles to suit design
- use tools and equipment
- fit and fix tiles
- grout and finish tile work
- communicate effectively

(4) Resource Implications

The following resources should be provided:

- workplace location prepared for tiling of surface
- materials required for the tiling activity
- tools and equipment appropriate to application processes
- drawings and specifications relevant to mosaic design

(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 guidance checking at various stages of the process and at the 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 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"> Carries out established processes Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> Manages process Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

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.

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&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&S legislation.</p>
2. Maintain safe working area	<p>2.1 Safe working area maintained in accordance with OH&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.

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|----|-------------------------------------------------------------------|-----|---------------------------------------------------------------------------------------------------------------------------|
| 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 SkillsKnowledge

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

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.

BCGTIL1143A: Tile pools and spas

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and tile pools and spas, and relates to individuals working in masonry and tile laying trades 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 tiling operations recognised and adhered to. 1.2 OH&S requirements for application tasks and workplace environment recognised and adhered to. 1.3 Materials and quantities determined from assessment of actual job, drawings and specifications. 1.4 Practical size of tile determined in accordance with curvature surface of pool or spa. 1.5 Appropriate personal protective equipment selected, correctly fitted and used. 1.6 Tools and equipment selected to carry out processes consistent with job requirements and checked for serviceability.
2. Set out tiling job	2.1 Assessment undertaken to divide pool or spa surface into sectional shapes involving whole tiles and cut tiles. 2.2 Sections determined considering sheet sizes of tiles applicable, and maintaining straight lines through length and width. 2.3 Cross centre lines marked out on pool/spa surface. 2.4 Curved surface set out to form regular shapes running down and through base. 2.5 Tapered sections set out in most severe curved areas whereby tiles will be cut leading to base.
3. Tile straight lines and full sheet sections of surface	3.1 Paper patterns marked and cut to shape of section or direct layout undertaken to prepare sheets/tiles for layout. 3.2 Spacing determined and/or adjusted to ensure none or minimum cutting in these sections.



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| | 3.3 | Prepared sheets or tiles marked to identify with section of application, where applicable. |
| | 3.4 | Specified waterproof adhesive prepared for application to manufacturer's specifications. |
| | 3.6 | Tiles laid working from coping down, maintaining parallel to cross centre lines and regular face alignment to specifications. |
| 4. | Lay tiles to tapered sections | |
| | 4.1 | Tapered areas, where applicable, set out to smaller tapered sections allowing for full tile at top. |
| | 4.2 | Tile sizes and shapes determined and set out to line set-out. |
| | 4.3 | Shaped tiles accurately cut to designed set-out to tolerance of 1mm. |
| | 4.4 | Adhesive applied and tiles laid maintaining alignment to set out lines and face surface of tiles, to specifications. |
| 5. | Grout tile surface | |
| | 5.1 | Tile spacing cleaned and all excess adhesive removed from face surface to receive grout according to manufacturer's specifications. |
| | 5.2 | Specified grout mixed and applied according to manufacturer's specifications. |
| | 5.3 | Tiled surface cleaned and polished with dry cloth to specifications. |
| 6. | Clean-up | |
| | 6.1 | Area cleared to specification. |
| | 6.2 | Waste and unwanted material disposed of safely. |
| | 6.3 | Unused materials stored/stacked. |
| | 6.4 | Tools and equipment cleaned, maintained and stored. |

RANGE STATEMENT

This unit applies to the tiling of pools and spas whereby the surfaces are not readily recognisable as specific shapes but in fact flow or curve from side to end and base.

Laying and fixing of ceramic or marble tiles are to be in accordance with:

- Building Standards - Adhesives for Fixing Ceramic/marble Tiles
- Building Standards - Guide to the Installation of Ceramic/marble Tiles

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

- workplace environment and safety
- protective clothing and equipment
- use of tools and equipment
- handling of materials
- working platforms and scaffolding

Tools and equipment may include but are limited to:

- tile cutters and scribes
- pincers
- measuring tape/rule
- trowels
- straight edge
- spirit level
- light hand roller
- scrapers
- files
- squares
- scissors

Methods of fixing tiles include:

- adhesives
- cement mortar with adhesive additive

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators/dust masks
- knee pads

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

EVIDENCE GUIDE

Competence is to be demonstrated by the performance of tiling a pool or spa with the design concept described in 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
- select and use appropriate processes, tools and equipment to carry out tasks
- apply organisational quality procedures and process within context of laying and repairing wall and floor tiles
- accurately set out pool or spa to mark centre lines
- give attention to design layout of tiles and patterns made to cover tapered areas
- mark and accurately cut tiles to size
- code tile areas for identification and sheets of tiles and single tiles coded accordingly

**Critical Aspects of Evidence (Cont'd)**

- fix tiles to maintain lines and spacing
- take care not to knock or move freshly placed tiles
- check cut tiles conform to size and shape to ensure consistent joint size is achieved
- identify typical faults and problems that occur and necessary action taken to rectify
- interactively communicate with others to ensure safe and effective tiling operations
- use safe and effective procedures to apply grout and finish tiled surface to specifications

(2) Pre-requisites Relationship of Units:

Pre-requisites for this unit are:

- Nil

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- workplace and equipment safety requirements
- drawings and specifications
- Relevant Building Standards for Tiling
- design methods for curved pools and spas
- mosaic application methods
- hazards associated with solvents, adhesives and cement/epoxy based grouts
- adhesives and methods of application
- mortar composition
- cutting of tiles
- tools and equipment
- substrate preparation
- fixing of tiles
- grouting and finishing of tile work

Skills

The ability to:

- work safely
- interpret drawings and specifications
- organise work
- set out pool or spa work
- use tools and equipment
- cut tiles
- fit and fix tiles
- grout and finish tile work
- communicate effectively

(4) Resource Implications

The following resources should be provided:

- pool or spa ready for tiling
- materials appropriate to proposed activity
- tools and equipment appropriate to preparation and tiling processes
- appropriate communication of documentation relevant to tasks

(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 guidance, checking at various stages of the process and at the 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 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"> Carries out established processes Makes judgement of quality using given criteria 	<ul style="list-style-type: none"> Manages process Selects the criteria for the evaluation process 	<ul style="list-style-type: none"> Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

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 3	
Use technology	Level 2	

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

BCGTIL1483A: Lay and repair marble floor and wall/column tiling

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and lay marble floors and install tiles to walls/columns, and applies to individuals working in masonry/tiling trades 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 & Safety requirements for workplace environment and of handling and fixing marble recognised and adhered to.
		1.3	Job material and equipment requirements determined from drawings and specifications.
		1.4	Samples of marble provided and approved prior to commencement of work.
		1.5	Appropriate personal protective equipment selected, correctly fitted and used.
		1.6	Tools and equipment selected to carry out processes consistent with requirements of job and checked for serviceability.
		1.7	Delivered marble checked prior to use to ensure conformity to sample, dimensions and tolerances, where applicable.
		1.8	Bedding and fixing materials selected in accordance with structural drawings and specifications.
2.	Prepare floor substrate	2.1	Location for marble tiled floor identified and set out to dimensions from job drawings and specifications.
		2.2	Structural floor checked for level and discrepancies marked and noted.
		2.3	High sections checked with finished texture and where required, ground down to base requirements.
		2.4	Area cleaned ready for laying of marble.

- 3. Lay marble
 - 3.1 Layout of marble set out to designed pattern from drawings and specifications.
 - 3.2 Materials checked for conformity to design and pattern, where applicable.
 - 3.3 Joints determined in accordance with specifications including metal strips.
 - 3.4 Bedding material of adhesive/mortar identified from specifications.
 - 3.5 Mortar and/or adhesive prepared in accordance with manufacturer's specifications.
 - 3.6 Bedding material applied and marble carefully handled in placing process.
 - 3.7 Marble and metal strips laid to specification to produce true level surface where applicable.
 - 3.8 Grouting mixed and carried out to specification, where applicable.
 - 3.9 Finished surface polished to specification for finish.
 - 3.10 Finished work protected in accordance with specification requirements.
- 4. Prepare column/wall for marble tiling
 - 4.1 Method of fixing determined in accordance with structural substrate.
 - 4.2 Datum or level line established.
 - 4.3 Locations for fixings set out to line in accordance with size of marble panels/tiles.
 - 4.4 Holes for anchors/dowels drilled to required depths or anchor brackets fixed to framework to set out locations.
 - 4.5 Wall anchors fitted and fixed into place by chemical anchorage.
 - 4.6 Dowels for floor fixing, if applicable, chemically/grout fixed to position.

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|----|-------------------------|-----|--------------------------------------------------------------------------------------------------|
| 5. | Fix marble panels/tiles | 5.1 | Marble panels/tiles carefully handled in positioning into place. |
| | | 5.2 | Scaffolding erected to OH&S requirements, where applicable. |
| | | 5.3 | Skirting or first panels fixed into place to line, level and plumb to specification. |
| | | 5.4 | Anchor brackets fitted and fixed into place to specifications. |
| | | 5.5 | Panels/tiles installed using cramps for face alignment and ties between edges. |
| | | 5.6 | Marble tiling installed with dry joints between panels/tiles to specified tolerances and finish. |
| | | 5.7 | Panels/tiles adjusted with clamps to ensure face flush and plumb. |
| | | 5.8 | Corner joints made to specified finish. |
| | | 5.9 | Marble face cleaned and polished to finish specification. |
| 6. | Clean up | 6.1 | Area cleaned to specification. |
| | | 6.2 | Waste and unwanted material disposed of safely. |
| | | 6.3 | Unused materials, stored/stacked. |
| | | 6.4 | Tools and equipment cleaned, maintained and stored. |

RANGE STATEMENT

This unit applies to the laying of marble to floor surfaces and fixing of marble panels/tiles to walls or columns.

Walls or columns may be constructed of:

- reinforced concrete
- brickwork
- structural steel sections

Anchor brackets for fixing of marble include:

- pin
- corbel plate
- slotted

Anchors to concrete or brickwork may be expanding sockets or chemically anchored bolts.

Types of cramps include:

- turned end
- back
- fish tailed
- s-hook
- dog

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

- workplace environment and safety
- protective clothing and equipment
- use of tools and equipment
- handling of materials
- working platforms
- use of adhesives

Tools and equipment may include but are not limited to:

- measuring tape/rule
- spirit level
- straight edge
- chalk line
- trowel
- grinding machine
- bedding mallet
- hammer
- clamping tool
- screw cramp and wedges
- g-clamps
- hammer drill and drill bits

Protection of finished work may involve:

- covering with plywood or particle board
- covering with old carpet
- isolated with barricades around
- covered and taped with plastic sheeting

Quality Assurance requirements may include:

- workplace operations and procedures
- quality of materials
- control of handling procedures
- use and maintenance of equipment
- attention to work specifications

Personal protective equipment may include:

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

Corner joints for panels/tiles may be:

- straight or butt joint
- bird's beak

EVIDENCE GUIDE

Competence is to be demonstrated by laying a marble floor and fixing marble tiling/panelling in accordance with any of the conditions listed within the range of variables statement.

(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
- apply organisational quality procedures and processes within context of laying and fixing of marble

Critical Aspects and Evidence (Cont'd)

- identify location and details of method of fixing marble
- identify hazards and control measures selected prior to commencing activities
- select and use appropriate processes, tools and equipment to carry out tasks
- use safe and effective procedures to handle materials
- accurately set out and install fixings to substrate
- use safe and effective procedures to complete surfaces to finish 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 of installation to alignment and finish to specifications

(2) Pre-requisite Relationship of Units

Pre-requisites for this unit are:

- Nil

(3) Underpinning Knowledge and Skills

Knowledge
Knowledge of

- marble and its characteristics
- methods of laying and fixing marble
- relevant Statutory OH&S legislation, standards and codes of practice
- workplace and equipment safety requirements
- site drawings and specifications
- scaffolding
- measuring and levelling
- tools and equipment
- fixing of materials
- adhesives

Skills
The ability to

- work safely
- interpret drawings and documentation
- organise work
- calculate material quantities
- set out work
- use tools and equipment
- communicate effectively

(4) Resource Implications

The following resources should be provided:

- workplace location
- materials appropriate to installation activities
- scaffolding components appropriate to tasks
- tools and equipment appropriate to application tasks
- appropriate documentation related to activity

(5) Method of Assessment

Competency should be assessed while tasks are undertaken.

Assessment may involve:

- observation of the application process
- questioning related to underpinning knowledge

Assessment may be 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 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 underpins effective workplace practices.

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

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 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.

BCGCOR1583A: Read and interpret plans

Competency Descriptor:

This unit deals with the skills and knowledge required to effectively read and interpret building plans and drawings, and applies to individuals working in the general & civil construction industry.

Competency Field: General Construction

ELEMENT OF COMPETENCY	PERFORMANCE CRITERIA
1. Identify types of drawings and their functions	1.1 Main types of plans and drawings used in the construction industry identified.
	1.2 Key functions of each type of drawing identified.
	1.3 Key users of these drawings identified.
2. Recognise commonly used symbols and abbreviations	2.1 Commonly used terms, symbols, scales and abbreviations recognised.
	2.2 Function of legend understood and explained.
3. Locate and identify key features on a site plan	3.1 Key features and dimensions of site identified and located.
	3.2 Orientation of site identified.
	3.3 Access from roadways to worksite located and identified.
	3.4 Services identified.
	3.5 Knowledge of construction details and conformity to building regulations demonstrated.
4. Identify and locate key features from sectional details and elevations	4.1 Specific key features identified correctly from sectional details and elevations.
	4.2 Structural features and horizontal/vertical measurements located.
	4.3 The ability to identify and relate to site survey of conditions of soil, natural damage, existing pits, foundations, drains, trees, etc. demonstrated.

5.	Recognise amendments	5.1	Title panel checked. Verification that drawing used is latest amendment.
6.	Read and interpret specifications	6.1	Purpose of specifications identified.
		6.2	Types of details identified from specifications.
7.	Read and interpret other drawings and plans	7.1	Drainage requirements determined.
		7.2	Existing surface level and finished surface level identified.
		7.3	Evidence of ability to read and interpret basic plans of other occupational areas demonstrated.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

The following variables may be present for this particular unit:

Types of drawings include:

- site plans
- elevations
- floor plans
- foundation
- roof plan
- sectional plans/elevations
- structural details and specification providing illustrations and dimensions
- sectional plans/elevations
- details and specification providing illustrations and dimensions

Other drawings and plans:

- electrical
- plumbing
- drainage
- roads
- landscape

Key features of site plans may involve:

- shape of site
- proposed building/s
- roads
- easements
- existing buildings/structures
- services
- dimensions

Key features of plans and elevations may involve:

- type of structure – structural members
- shape of building/structure
- type of construction
- layout of rooms
- service requirements
- location of plant or machinery
- vertical and horizontal measurements

Types of construction include but are not limited to:

- structural steel framed
- light steel framed
- timber framed
- reinforced concrete
- pre-cast concrete
- solid brick
- brick veneer

Services may include:

- drainage
- sewerage
- gas
- water
- electricity

Civil construction includes:

- tunnels
- bridges
- culverts
- earthworks and other types of construction

Types of structures include:

- single storey buildings
- double storey buildings
- multi storey buildings
- bridges
- fabricated towers
-

Types of details include but are not limited to:

- structural steelwork
- timber framework
- brickwork
- concrete work
- plastering

Orientation of site includes:

- relationship to 'north'
- location of roads
- relationship to roads and neighbouring sites

EVIDENCE GUIDE

Competency is to be demonstrated by effectively reading and interpreting drawings to locate or identify nominated features or functions 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:

- identify and understand various types of drawings
- identify dimensions, symbols, abbreviations and key features
- identify title panel and reference date as to up-to-date copy of drawings
- indicate sound understanding of purpose of specifications in accordance with the work orientation

(2) Pre-requisite Relationship of Units

- Nil

(3) Underpinning Knowledge and SkillsKnowledge

Knowledge of:

- a range of drawings
- materials relative to drawings/specifications
- measurements and calculations
- symbols, dimensions and terminology

Skills

The ability to:

- read and interpret drawings
- measure accurately
- communicate effectively

(4) Resource Implications

The following resources should be made available:

- Suitable range of drawings and specifications

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

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.

BCGTIL1593A: Lay terrazzo tiles

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare and lay terrazzo tiles, and applies to individuals working in masonry and tiling trades 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 & safety (OH&S) requirements for application tasks and workplace environment recognised and adhered to. 1.3 Drawings and specifications interpreted so that location of terrazzo tiles identified and material requirements determined. 1.4 Surfaces/areas to be tiled are accurately measured and calculated. 1.5 List of materials and tile requirements is prepared accurate, legible and submitted for appropriate action. 1.6 Appropriate personal protective equipment selected, correctly fitted and used. 1.7 Tools and equipment selected to carry out processes consistent with job requirements and checked for serviceability. 1.8 Safety hazards identified and correct procedures used to minimise risk to self and others.
2. Select materials	2.1 The type, quantity and quality materials selected and checked conform to job specifications. 2.2 Materials are handled and stored in a manner to prevent loss or damage.
3. Prepare substructure	3.1 Working lines are laid out square and conform to job specification and the tile installation system to be used. 3.2 Uneven background surfaces are built up using appropriate filling/bedding materials.

- 3.3 The height of substructure take into account the thickness of the tile, mortar joint and clearing height of doors where required.
 - 3.4 Prepared substructure is level, true, and where required, is well compacted.
- 4. Lay terrazzo tiles
 - 4.1 Mortar base materials are proportioned and mixed to job specifications.
 - 4.2 Base-mix placed, spread and screeded to correct thickness, level or falls, where applicable, to specification.
 - 4.3 Test rows of tiles laid along working lines provide accurate dimensions for succeeding rows
 - 4.4 The terrazzo tiles are laid in accordance with design specifications.
 - 4.5 The laid tiles are level in the same plane and are neat in appearance. Joints are aligned and uniform.
 - 4.6 Cuts made in tiles are clean, smooth and neat.
 - 4.7 Drying time of 24 hours allowed prior to further applications.
 - 4.8 The grout is thoroughly mixed to recommended consistency.
 - 4.9 Joints are tightly compacted with grout, and where required, all traces of grout film are wiped off from tiles.
- 5. Grind and polish terrazzo tiles surface
 - 5.1 Surface is ground all over using portable grinding machine.
 - 5.2 Voids or holes filled with like colour cement mortar to specifications.
 - 5.3 Surface polished and finished flat and free from scratches, chips, stains and other defects.
- 6. Clean up
 - 6.1 Area cleared of waste, materials and equipment.
 - 6.2 Waste and unwanted material disposed of safely.
 - 6.3 Unused materials stored.
 - 6.4 Tools and equipment cleaned, maintained and stored.

RANGE STATEMENT

This unit applies to the laying of terrazzo tiles to:

Materials used in the laying of terrazzo may include:

- cement
- granite
- basalt
- sand
- coloured cement

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

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

Tools plant and equipment may include but are not limited to:

- measuring tape/rule, cord line
- tile pick
- masonry bucket
- tiling trowel
- shovel
- spirit level
- ball pen hammer
- square
- cold chisel
- concrete mixer
- screed boards
- wheelbarrow
- tamper
- portable grinding machine
- polisher
- power leads

This unit applies to the laying of terrazzo tiles to:

- floors
- steps
- stairs
- landings

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

Personal protective equipment may include:

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

Hazards may include but are not limited to:

- limited access to application area
- barricades
- other work personnel
- excessive noise nearby
- dust

EVIDENCE GUIDE

Competency is to be demonstrated by preparation and laying terrazzo tiles to finish to a floor 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
- indicate compliance with organisational policies and procedures
- select and use of appropriate processes, tools and equipment to carry out tasks
- apply organisational quality procedures and process within the context of laying terrazzo tiles
- adapt and use safe and effective procedures to prepare surface for terrazzo tiles
- select and proportion materials for composition mixes
- adopt and apply safe and effective procedures to lay and screed base mix
- apply topping mix to specification
- apply safe and effective procedures in grinding and polishing surface to finish specification
- identify typical faults that occur and corrective action taken to rectify
- interactively communicate with others to ensure safe and effective workplace operations

(2) Pre-requisite Relationship of Units

Pre-requisites for this unit are:

- Nil

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- workplace and equipment safety requirements including relevant statutory regulations, codes and standards
- drawings and specifications
- estimation
- types, size, characteristics and purpose of terrazzo tiles, coves, skirting, nosing, jointing strips and expansion/movement strips
- effect of selecting the wrong sand for mortar
- purpose of centre line/starting point
- methods of checking for square, angles, shale, fall, level
- method of applying terrazzo tiles
- Quality Assurance
- use of plant and equipment
- placement and compaction of base
- handling of materials
- worksite communication

Underpinning Knowledge and Skills (Cont'd)

Skills

The ability to:

- work safely
- read and interpret drawings and specifications
- organise work
- handle materials
- select material
- use plant and equipment
- calculate materials
- prepare sand base sub-structure
- place concrete
- cut terrazzo tiles
- protect tiled areas
- communicate effectively

(4) Resource Implications

The following resources should be made available:

- general construction materials relevant to application of terrazzo tile work
- plant and equipment appropriate to application of terrazzo work
- suitable work area appropriate to application of terrazzo work
- drawings and specifications relevant to proposed activity

(5) Method of Assessment

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

Assessment may be by intermittent checking at various stages of each application task or at the end of each task in accordance with the performance criteria and specifications

(6) Context of Assessment

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

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 the completion of the activity against performance criteria and specifications.

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

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 2	
Solve problems	Level 3	
Use technology	Level 2	

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 SkillsKnowledge

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

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